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Volume CLXXVI No. 2298 The SPHERE, London, February 5, 1944

THE SPHERE

With which is incorporated "THE GRAPHIC"

The Empire's Illustrated Weekly

HOW THE EQUIPMENT FOR INVASION GOES ASHORE TO THE BRIDGEHEADS: A PICTURE FROM THE CAPE GLOUCESTER REGION OF NEW BRITAIN, showing how a supply ship carries its stores to the beaches for the parties already landed

With the invasion of Europe coming ever closer, this picture from the South-West Pacific gives a vivid impression of the complexity involved in a landing on hostile shores. The Tank Landing Ship seen above is heading for Cape Gloucester, where American troops landed recently in the second invasion of New Britain. In addition to the U.S. Marines crammed on board the vessel, the decks are loaded with a variety of material, all of which is urgently needed by the men already consolidating the bridgehead on shore. The complexity of this material is surprising, ranging as it does from jeeps and petrol bowsers down to coils of barbed wire and rifle ammunition. All this material has to be loaded in such manner that the most urgently needed items are off-loaded first. The vehicles on the deck are ready to be driven right off on to the beaches

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A WAR NEWSLETTER —No. 231

1, NEW OXFORD STREET, W.C.1.

Leningrad Relieved.—The Leningrad campaign of January 1944 will doubtless become a *locus classicus* of military efficiency and swift and complete success in the planning, organising and execution of an assault on a broad system of modern fortifications-in-depth, long prepared and strongly manned. The Nazis had good grounds for confidence. The Leningrad ring was the pride of the German Army; the moral of all troops which held it over two and a half years rose in response to the confidence and fame which these defences evoked. Yet those defences fell to the Red Army as the Walls of Jericho to a bugle-call, and the Nazis streamed away in something like panic after suffering crippling losses in men and material. Leningrad was rich enough in historical traditions before this long and bitter siege began. To-day the name of Leningrad will stand first in human memory when mention is made of military sieges, and all the suffering and powers of resistance which they can produce. And the Red Armies which raised the siege and inflicted so tremendous and so crippling and so humiliating a defeat on the Nazis are sure of their fame among the Posterities in Russian and military history. It is a portent, a Tannenberg; for Hitler it is the writing on the wall, and the wall itself is crumbling swiftly. That must be as clear to Hitler as to his accomplices and slaves; as it is to neutrals and to the Allies. The hunt is up, and Leningrad is freed from long torture, *finally*.

Argentine.—It is a pretty word—"Silvery; of or belonging to silver." And silver in its commercial sense enters into the relations of sovereign states with their neighbours more often and more importantly than in any æsthetic sense. British capital helped Argentina to develop. Millions of British capital, uncountable stores of British initiative and energy, went to the making of Argentina, and for decades that capital has been locked up and frozen in Argentina. That counts for little. Investment in the "bad old days of Capitalism" is suspect and deserves no dividend in memory or gratitude. But Britain and America, especially in wartime, are still good customers, and Argentina is a great producer of foodstuffs, and she vitally needs a market, and customers who pay on the nail and can take their goods away in "their own plain van." Argentina, late in the day, has come into line with the other great South American sovereign states. Thanks largely to the initiative of the British Intelligence Service, she has discovered that her territory has long been a hotbed and happy hunting-ground of Axis spies, agents, saboteurs. But the "discovery" coincided with the discovery that her two best customers were discovering other markets for essential foodstuffs. That detracts from the virtue of Argentina's conversion. Spain and Argentina have been among the very last to retain that "longing, lingering look behind" to the ideology and dreams of Nazism. No two countries have more jealously upheld in words the integrity of their sovereign rights, and the purity of their impartial neutrality. Still, as of old, there are twenty pieces of silver to a sovereign.

Steadying Influence?—Is it coincidence or direct effect of the Premier's return to England that a steadying influence seems to have taken a timely grip on affairs, international and domestic? Just before Mr. Churchill's surprise return, quite a number of very important matters seemed to the average Briton to have got out of hand and to be heading for trouble. There was the Polish frontier question, for example. Why in the world (we wondered), in so far as British diplomacy could influence this burning question, was that influence not exerted long ago—for the event was clearly to be foreseen—by a firm announcement from the British Government that it would have no part or lot in any discussions on the redrawing of the map of Europe until the common enemy of mankind had been driven back within the frontiers of the pre-war Reich. The armchair strategist in diplomacy, no doubt, wears as tall a fool's-cap as his military counterpart. But this policy in regard to post-war frontiers seems to the ordinary man the most elementary horse-sense, a safeguard for the smooth co-operation of a total war by allies, which common prudence *must* have foreseen and taken measures to secure. Not for months but for years this grinning spectre of frontier disputes has been the bogy of post-war settlement, the Spielman of victory and future peace. And we have not done what little we could to keep it in the background until at least that victory is achieved. On the contrary, just before the Premier's return, it looked as though we were committed to some sort of diplomatic intervention over a burning international question the details of which are (to the common mind) totally irrelevant, utterly to be outlawed, and indeed non-existent, while there are Nazis still in Poland and Nazis anywhere but within the Reich frontiers of 1920. Perhaps our hopes that Mr. Churchill will relegate this irrelevancy (as regards Britain) to its proper time and place are a measure of our ignorance of international affairs.

A CHURCH WITHIN A CHURCH: The reconstruction of historic St. Alfege's Parish Church at Greenwich.

A new church has arisen inside the shell of St. Alfege's Parish Church, Greenwich, which was destroyed in 1941 by incendiary bombs. The new church is partitioned off by Essex boarding supported by a wooden framework with a ceiling of the same material. In area it covers a quarter of the original church, affording seating accommodation for 160 persons. Fortunately, much of the church's famous oak panelling, reputed to have been carved by Grinling Gibbons, was saved from the flames, and once more is incorporated in the mural decorations of the new church. Altar rails are formed from the wrought-iron scroll work which supported the old galleries, and the oak seats come from St. Cyprian's, Brockley, which was also destroyed by fire. Though many treasures perished in the fire at St. Alfege's, the Charles II communion plate was saved, together with the cross and other altar ornaments; also the keyboard of the Tallis organ, on which Byrd, the father of English Music, taught Queen Elizabeth and her sister Mary

Coincidence or Direct Effect?—In the domestic sphere also, there were matters which appeared to have developed to an unsatisfactory pass as a result of lack of foresight and of regard for detail. The organisation of the "Bevin boys" instantly revealed these failings and the necessary adjustments have a little jolted our faith in the efficiency of a Government which has such vast reserves of modern experience on which to draw. For some months also the public voice had grown clamorous for some clear guidance from the Government on several aspects of post-war rehabilitation, lacking which the essential spadework of local authorities and public and private corporations can be but ploughing the sand. Coincidence or direct effect, Mr. Churchill's return has already done something to undo these false steps and to repair these omissions.

Of Gas-Masks and Common Sense.—In September 1939 one carried one's gas-mask "at the ready" if one walked from the house to the garage. In October 1939 one used the container for snacks or nuts. We live and learn; and enjoy alternate waves of alertness and complacency in war and peace. At various times in the past desolating years, chemical warfare possibilities have been "naps" and "outsiders." At various times, Home Guard and Civil Defence services and fire-fighting units have been starred as of No. 1 importance or dismissed by the complacent as bluff and wasted energy and egregious nonsense and meticulous over-precaution. To-day we are asked again to look up, and into, our gas-bags and to resume the alert position. It is plain common sense. The last climax draws near. For four-and-a-half years we have crammed the chinks against filters of light, trained to resist invasion, to combat sabotage, to put out fires, to succour trapped victims. After four-and-a-half years of vigilance, is there not bare common sense in the argument: "Carry on the account for at least one month for every year of vigilance past"? It *is* plain common sense. Within the next few months this invasion will surely take place. If it takes place opposite the British channel coastline, the *Luftwaffe must* meet it in part over British soil. Wasting or wasted, hidden reserves or none, the Nazi Air Force must try to interrupt our home communications, roads, railways, air bases, dumps, concentrations, by bombing, by suicide squads, by parachute sabotage, and in the last stage of desperation by methods possibly outlawed by even semi-civilised man. If we detect no visible sign of invasion preparation in the "creeks and inlets" of our own bit of coastline, let not that negative information induce complacency. Let us chalk it up rather to our own commendable lack of inquisitiveness into military secrets or even to military security efficiency. Let us outlaw complacency, keep at the alert and scrape the barnacles from our gas-bags. Hope for the best: expect the worst—for a few more weeks after so many, many months of constant anxiety.

Assault on Our Language.—A correspondent urges me to "use my influence" to dam, kill, stop and outlaw the ever-increasing mutilation and vulgarisation of our language by debased or slang expressions. Alas! It would take stronger influence than mine to achieve any such thing. Our language, so long as the war lasts, is at the mercy of young bureaucrats, young staff officers and foreign influences, none of whom are on the intellectual level of a French Academy. My correspondent brands among other base coins:

Step up for increase.
Try out for try or test.
Face up to for face.
Donate for give.
Loan for lend.
Rent for hire (or even let).
Located for placed.
Store for shop.
Won't play for won't co-operate.
Charlady for charwoman.

Obviously the list could be greatly enlarged. What is remarkable in it is the proportion of these base coins which come from (and have long been current in) North America. The Americans more often than not are extremely clever at coining homely and pithy words, many of which have found an honoured place in our dictionaries. It is also interesting to realise that many so-called Americanisms were current and pure English in the England of the Pilgrim Fathers, and are not "new." But some of these modern instances lower the standard of American invention—and they deserve to be outlawed.

THE OLD STAGER

PICTURES FROM THE NETTUNO BRIDGEHEAD

And Details of the Newest British Anti-tank Destroyer, the Piat Projector

NAZIS CAPTURED AT NETTUNO are here seen in a group just after they had been collected on the beach, after the establishment of the Fifth Army's bridgehead

THE AMERICAN TROOPS GO ASHORE: Their lorries are here moving up after metal roadways had been laid down across the sandy beaches at Nettuno. Later they penetrated further inland from the coast

AFTER AN ALLIED ATTACK on the German-held aerodrome at Ciampino, south of Rome. The field has been pitted all over with bomb craters, and it will be out of action for some time. This picture was taken from an R.A.F. Spitfire

AN R.A.F. SPITFIRE COMES IN TO LAND AFTER A PATROL over the Allied beachheads south of Rome. Other Spitfires, with their engines running, are lined up ready to take off to maintain an effective air cover

THE PIAT ANTI-TANK PROJECTOR: How the bomb is loaded. No. 2 slips the bomb on to the support, when it is automatically correctly positioned. Upon pressing the trigger, the spigot flies forward passing up the tail tube of the bomb to fire the propellant cartridge. Note the fins and drum-tail, which ensure steady flight

MAJOR-GENERAL ROWCRAFT (DIRECTOR OF MECHANISED ENGINEERING) TRIES OUT THE PIAT PROJECTOR: from left to right are seen the bomb support, the foresight, trigger, hand-grip and adjustable backsight. The Piat Infantry anti-tank projector has been in use in the Middle East since early in 1943, but details have only just recently been announced of this hitherto "secret weapon." Designed to penetrate and stop any German tank at 115 yards range, it is also effective against strongpoints up to a range of 350 yards. The two pictures given here were taken during a demonstration against a German tank: they show the mechanical details of this formidable but inconspicuous infantry weapon

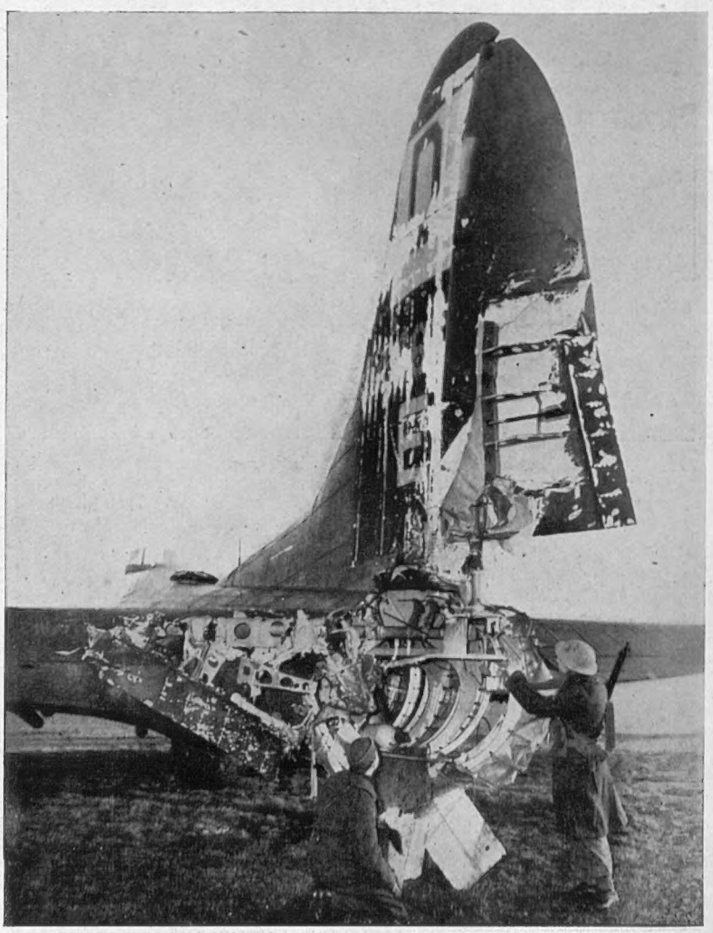
HOW A 4,000-POUNDER IS LOADED

Shown for the First Time in Two Impressive Pictures Just Released

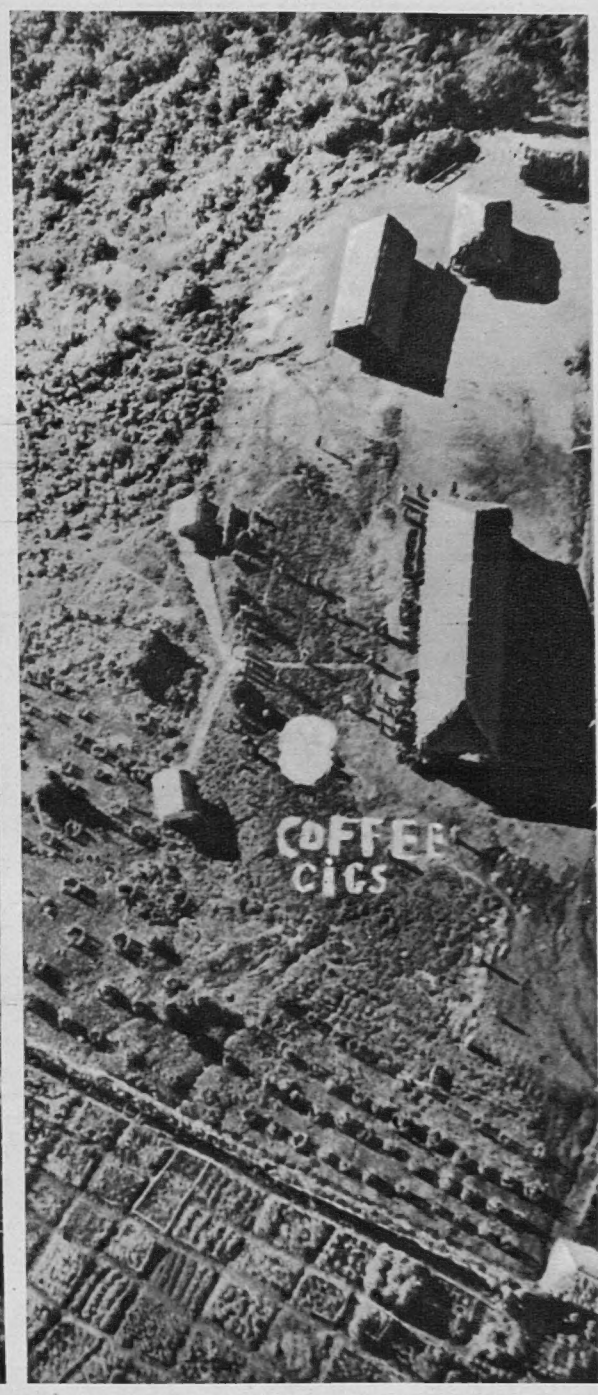
THE 4,000-LB. BOMB BEING HOISTED INTO THE BOMB BAY OF A LANCASTER by means of winches in the body of the aircraft. On either side are incendiary containers, each of which contains over a hundred bombs. These are only a part of the load carried by each Lancaster during the R.A.F. raids over Germany by night

INSIDE THE BODY OF THE LANCASTER. The Armoury Officer (on left) watches the heavy 4,000-pounder being hoisted into position. Two hundred turns of each of the two geared winches are necessary to hoist it up to a height of 5 ft. above the ground. The 4,000-lb. "cookie" is the weapon with which much of the devastation wrought in Germany has been effected. Other bombs, and incendiary containers, are also carried in the aircraft's capacious bomb bay

THE NEW MUSTANG LONG-RANGE FIGHTER: Feeding belts of heavy-calibre machine-gun ammunition into the wings of the P51B. This new-type fighter aircraft only recently made its first appearance in air battles over Europe: it has been taking part in the American offensive against industrial targets in Germany for more than a month and has already proved that it can outfly, out-climb, out-range and out-manœuvre any intercepter aircraft in the service of the *Luftwaffe*. The new Mustang has a combat radius of over 450 miles, enabling it to support and cover heavy bombers in attacks on any industrial objective in North-Central and North-Western Germany. It has a speed of over 400 miles an hour, and can operate with precision at an altitude of 35,000 ft. Recently, in three consecutive operations over enemy territory, the Mustangs brought down more than thirty single- and twin-engined enemy fighters of all makes without losing a single plane or pilot. The plane—which has established these records in less than two months of combat flying—is equipped with a 1,500 horse-power Packard-manufactured Rolls-Royce Merlin engine. The racks under each wing can carry either 500-lb. explosives or drop-tanks with 75 gallons of petrol each



WHAT HAPPENS TO THE BIG AMERICAN BOMBERS during their air battles by daylight over German territory: This Flying Fortress, "Hang the Expense," operated by the U.S. Army Air Force, made an emergency landing on an R.A.F. airfield after its return from a bombing expedition over Germany. Its tail gunner's compartment and its elevator were completely blown away. Despite this terrific battle damage, Lieut. Frank E. Valesh, twenty-three-year-old pilot, brought the aircraft across the Channel to make a perfect three-point landing. It was his fourth emergency landing in less than four weeks



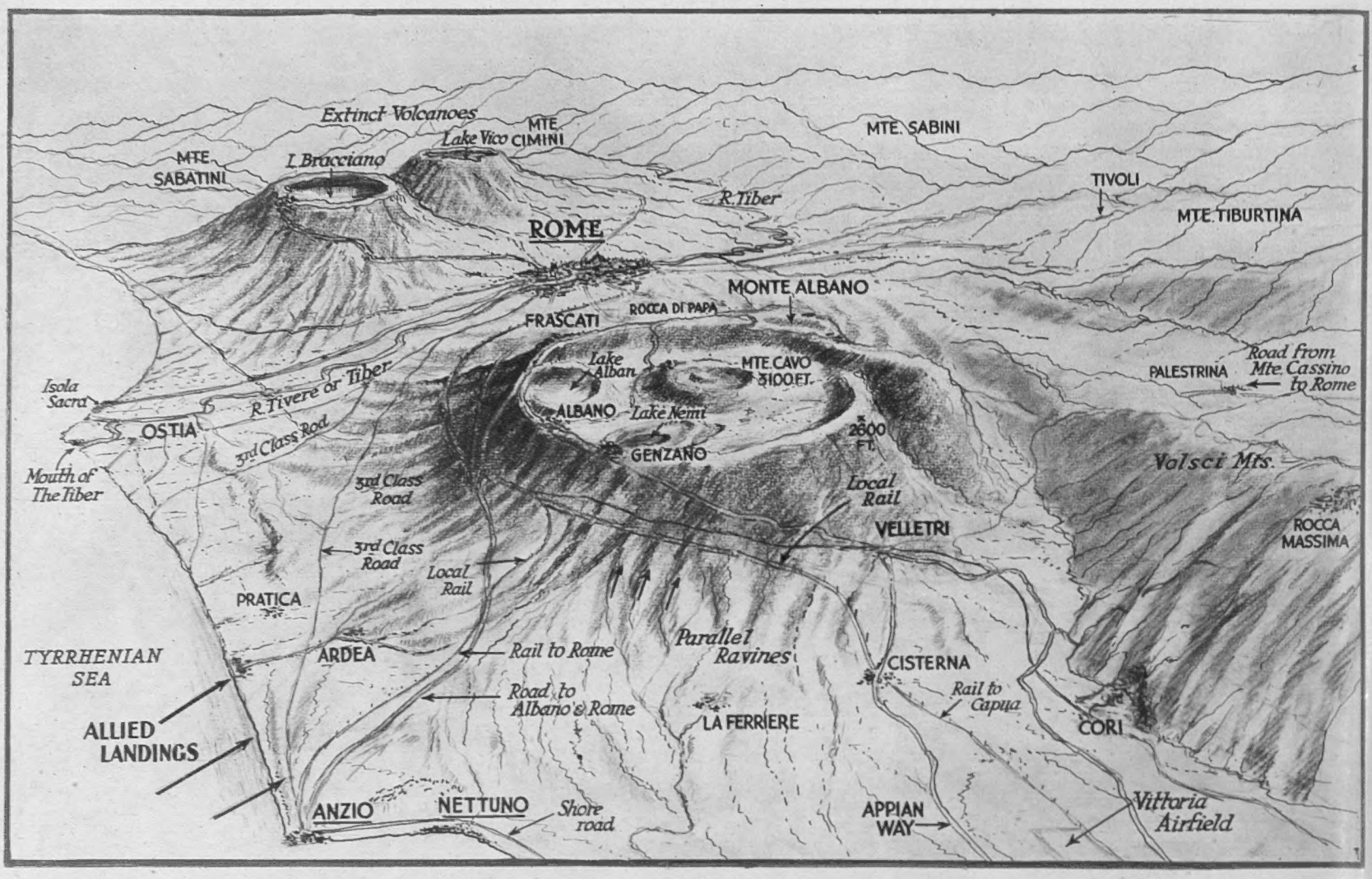
AIR RESCUE IN THE JUNGLE

Three Dramatic Pictures Taken During Recent Operations in New Guinea

During the heavy fighting in the Pacific theatre of war, a B24 bomber was forced down in the jungle mountains of New Guinea. The three pictures reproduced here show how the crew exhibited their resourcefulness in signalling to the aircraft which were sent out to effect their rescue. Some members of the crew pushed ahead through the jungle to locate a missionary settlement: the picture on the left shows the signal they laid out on the ground to indicate their route to their comrades coming up behind. The centre picture, taken at a later date, shows the airmen on the ground starting to form the Jolly Roger insignia for identification from the air, and also indicating to the rescue aircraft their immediate needs of cigarettes and coffee. On the right, the Jolly Roger sign is completed and the crew are ready to be picked up at the time indicated: with the letter "T" they have also announced that the wounded member of their party can safely be moved by plane. The rescue of the men was effected one at a time

THE TARAWA AIRFIELD, IN THE GILBERT ISLANDS, BACK IN SHAPE FOR FLYING SOON AFTER ITS CAPTURE BY THE AMERICANS

On November 20 the first major blow against the Japs in the Central Pacific was struck when American troops and Marines, supported by a powerful naval "Task Force," landed and secured bridgeheads on Makin and Tarawa Islands in the Gilbert Group. Three days of heavy fighting followed, during the course of which the Americans suffered losses greater than any they had experienced since the sanguinary battles for Guadalcanar. But eventually every one of the 4,000 Japanese on the islands was killed. The first task was to clean up the landing strip, for further operations against the enemy at Bougainville and New Britain. This was done in record time; and soon the shell-scarred aerodrome took on the appearance seen above—despite bombing raids by Jap aircraft. When this picture was taken, heaps of enemy dead were still lying on the ground elsewhere on the island. The big aircraft on the right was the first transport plane to alight after the air strip had been rebuilt: it is a C47, and it brought Admiral Chester W. Nimitz, the Commander-in-Chief of the U.S. Pacific Fleet, to Tarawa



WHERE THE LANDINGS WERE MADE AT NETTUNO AND ANZIO, AND THE MASS OF MONTE ALBANO which lies between the Allied troops and the city of Rome. This is a volcanic mass which might prove a formidable obstacle during our advance northwards to the capital (See notes below)—*Drawing by Percy Home*

THE NETTUNO LANDING

The Nature of the Country between the Bridgeheads and the Italian Capital. And the First Radio Pictures of the Operations

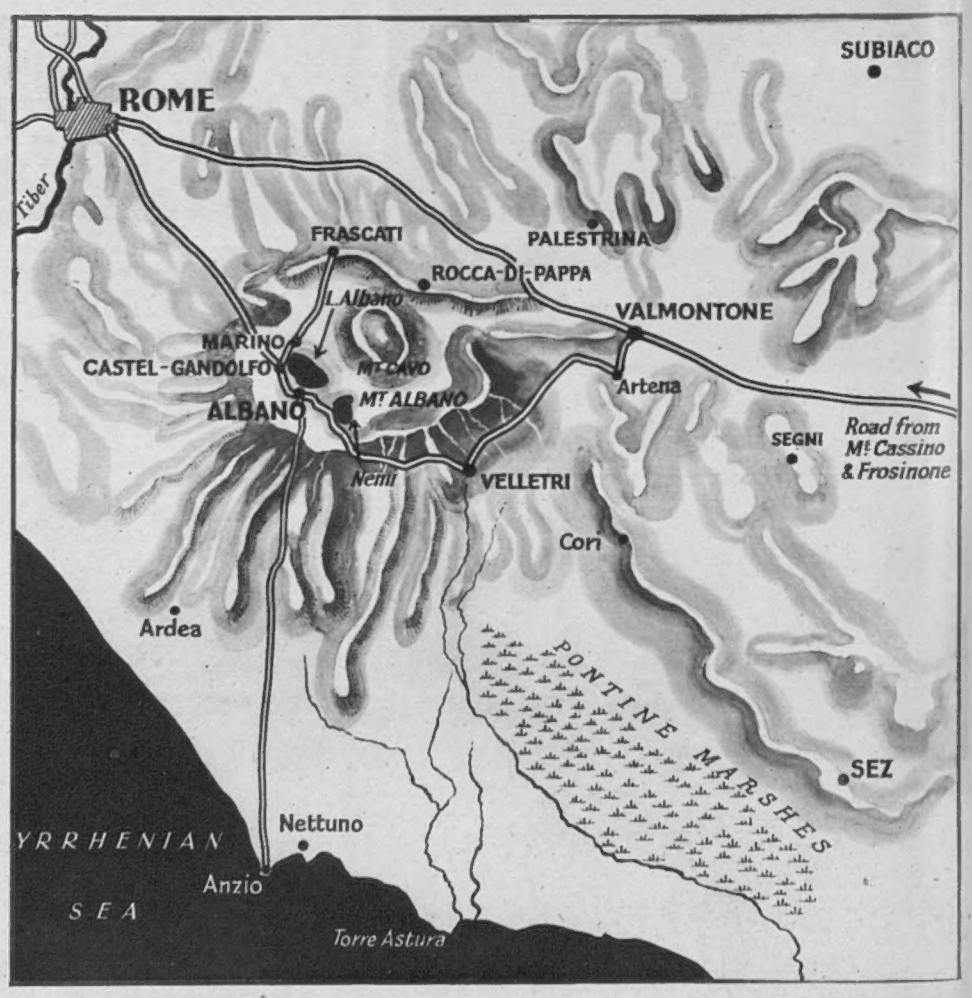
THE landings in the vicinity of Rome took place in the area to the south of Monte Albano and to the north of the Pontine Marsh area, which the operation thus "by-passed." This region presents some unusual features, but these were not immediately encountered by the landing parties. The sand-dunes, backed by wide stretches of woodland, had first to be penetrated. Two little seaside towns, Anzio and Nettuno, offered few difficulties, as the enemy was nowhere found in force. The little fishing harbour at Nettuno provided a useful harbour.

Behind the wooded area, the terrain begins to rise towards Monte Albano, a big, extinct volcano containing two famous lakes. A local railway line links Anzio with Rome; a roadway following the same route and another road links La Ferriere with Cisterna and Velletri. Several third-class roads link Ardea and Pratica with the capital. The whole countryside inland towards Monte Albano is seamed with water-courses and ravines, which radiate outwards from the sides of the extinct volcano in all directions.

The main roads and railways cut across these and climb the sides of the crater in some places. The towns of Genzano, Albano and Frascati, all perched high above the surrounding country, are thus accessible by road. To the north the ravines run down towards the Tiber Valley. Away to the right the volcano is flanked by the Volsci Hills. Rocca Massina, one of the highest-perched villages in the whole of Italy, commands the valley from a dizzy eminence. Away to the south the roads and railway lead to the northern end of the Pontine Marshes and the Littoria aerodrome.

The Alban Hills consist of a mass, wholly volcanic, which culminates in Monte Cavo, a cone and crater the tip of which is at a height of 3,130 ft. The Alban Lake is the larger: it is oval in form, about 2½ miles long and 1½ miles wide. The Lake of Nemi is about 100 ft. more in elevation.

"DUCKS" LOADED WITH BRITISH TROOPS coming ashore to establish the first bridgehead at Nettuno. The operation was carried out early in the morning of January 22. The amphibious attack began before dawn, with Fifth Army troops going ashore from their special landing craft along a beach front extending several miles from north to south



ANOTHER IMPRESSION OF THE ALBAN HILLS, to the south-east of Rome. All the roads from the Nettuno area and from the Fifth Army's area around Cassino skirt this region, where the going might prove somewhat difficult. To the south lie the Pontine Marshes, which the Germans were reported to have flooded some months ago

TWO VIEWS OF NETTUNO, THE ITALIAN COAST TOWN IMMEDIATELY OCCUPIED BY ALLIED TROOPS AFTER THE LANDING. Both this and Anzio had been evacuated by the civil population; but by the end of the first day some 300 out of the 11,000 inhabitants of the area had drifted back. Nettuno was a gay and very pleasant bathing resort with many lovely villas: Anzio was constructed by Nero, and its little harbour has been used by Italian coastal shipping ever since

THE FIRST RADIO PICTURES FROM NETTUNO

AMERICAN SOLDIERS LANDING, after the bridgehead had been established. Vehicles and supplies were also landed, some of the amphibian "Ducks" running right up on to the beach

THE RAILWAY YARDS AT LITTORIA. This is a town in the Pontine Marshes: it possesses an airport, and also marshalling yards of considerable extent. The report of its capture by the Allies, "without very strong opposition," soon after the landings, was strenuously denied by Rome radio on January 26. Its strategic importance—to both sides—is obvious

HOW THE FIFTH ARMY WENT ASHORE NEAR NETTUNO, where the beach shelves gently upwards. Note the big landing craft disgorging their cargoes out in the little bay

THE COMMANDER-IN-CHIEF OF THE ALLIED ARMIES IN ITALY lands at Nettuno to witness the progress of the landings. General Sir Harold Alexander was himself present on the beaches quite early during the landing operations. He is here watching a British soldier sweeping for mines in the Nettuno area. With him (on the right) is Admiral Troubridge, who commanded the naval forces which took part in the amphibious operation

On left—The men of the United Nations who put up the air "umbrella" over the Nettuno landing forces. These Spitfire pilots come from England, Canada, Australia and South Africa: they are here seen as they returned from a patrol over the bridgehead area

THE GREAT NAZI MINING PLOT

The Wholesale Destruction which the Germans Plan to Leave in their Wake as they Retreat into the "Fortress" By FERDINAND TUOHY

AS the dates for general invasion of the Continent draw closer, many thoughts must be concerned with the stark prospect of the Germans leaving a heap of ruins behind when the time comes for them to withdraw bit by bit, as they evidently anticipate, on the "Fortress Germany" itself.

We know about scorched earth. The Russians began it by scorching their own earth in their perilous retreat in the summer of 1941. It was patriotic or self-sacrificing action of a revealing magnitude such as surprised friend and foe alike. Directly ordered by Stalin, it was grimly responded to, and the wholesale wrecking altered the speed of the German advance, although its main effect was to come later, when the Germans tried to settle down in the ruined places and get things going again.

As for the plight of the millions of Russians left behind in their own ruins—the Nazis took off as many as they wanted into slavery, and let the rest go hang.

The next chapter of scorched earth opened after Stalingrad, and this time the destruction was wrought by a retreating enemy. The beaten Hitlerites were frequently moved out of places too quickly to allow of them doing their worst. Again, it was probably impossible to say just what destruction had been deliberately wrought on a city like Kharkov, as distinct from the demolition of battle. And this second major scorching of Soviet territory was difficult to assess for another reason: it was superimposed on previous destruction executed by the Russians themselves.

My aim is to suggest that the circumstances of Russian scorched earth, caused in the first instance by the Russians themselves, and, later, a result of the splendid liberating work of the Russian armies, did not produce repercussions of a social and political order such as the Germans are apparently planning to bring about if they can, by a gigantic mining or demolition plot in the West. The foregoing Russian considerations aside, the huge spaces sparsely populated by peasants in the East, with occasional town and city dwellers, are far from being the same thing as tightly-packed Western Europe with its almost urban chains in some regions. What a field for scorched earth! The Nazis may well gloat.

Yet I hardly think they have been gloating: even the Nazis are getting past that. Rather have they been using this scorched-earth-in-the-West prospect with three aims in view, or so it seems: (a) to convey to their stricken Home Front that if the *Luftwaffe* cannot retaliate adequately, yet these foreign towns will be ruined even as German centres have been; (b) to give the Allied invasion planners something additional, and very serious, to worry about—since on the material side alone these staffs must pile up preparations even should the Germans in the outcome not demolish on a grand scale; (c) to sow the seeds of anti-British-American sentiment in the occupied countries.

The tales spread by Goebbels to the effect that the Nazis would be willing to leave these countries are certainly part of the scheme. "So you see," they insinuate, "that whereas we Germans are ready to pack up and thereby save your country from destruction, the Allies insist on fighting us in your countries which will be brought down in ruin in consequence."

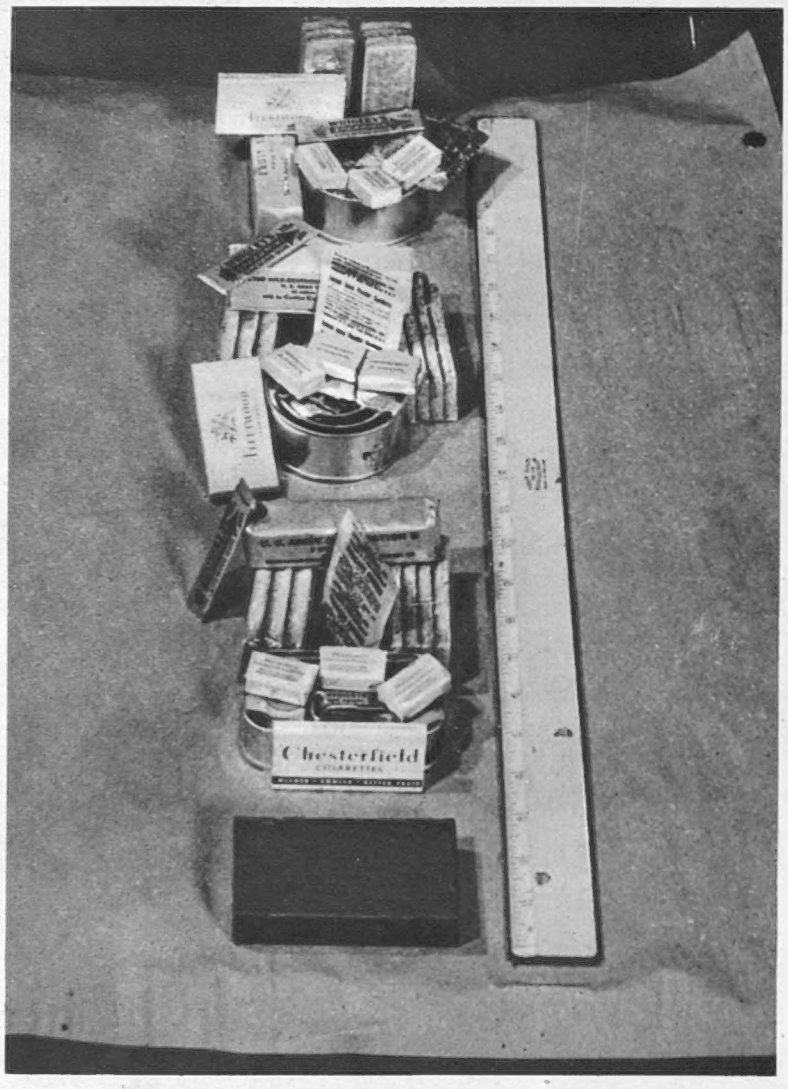
This line of propaganda might be expected to give most yield to the Nazis, did the Allied armies become stuck for a lengthy period across a land they set out to liberate; nor should the possible effect of this be judged exlusively by the sunken apathy that developed under parallel conditions among Southern Italians. Clearly, a Nazi hope is germinating that Western European peoples, confronted by the steady destruction of their countries with all the attendant horror of total war, might become clamant for some form of negotiation to halt it all.

The Germans have been "plugging" Europe for weeks with an hors d'œuvre account of Italy in the hope of awakening preliminary sentiments of the desired kind in the other occupied countries. Nor have they been purely inventing their stuff, as the following observations by a British war correspondent testify:

"Psychologically, the devastation and misery produced in Italy may carry wider drawbacks. The spectacle of this slow grinding mode of delivery and its consequence is hardly calculated to encourage the other peoples of Occupied Europe to greet our approach with joy. It is a question we should be wise to bear in mind when planning future moves."

Yet the Germans are not content with holding up the Allies as the practitioners of destruction. It is part of their game to tell the occupied countries how they, the Germans, will be driven to earth-scorching in military defence, and how they will not be deterred from destroying a whole city should the need for such an example arise. In these broadcasts, the Germans have more than once used words suggesting that they possess a mammoth explosive in waiting.

"The day is not far off," said Goebbels's *Das Reich*, quoted by the German Overseas Service, "when it will be possible to blow up half the globe. Our action will have the most surprising psychological and moral results. For the German High Command the reprisals need not be a triumph for its arms." A previous broadcast had stated that, reluctantly, but because of the Allies' barbarous methods of warfare, the German army would be obliged to proceed to certain counter-measures not previously contemplated.



WHEN WE INVADE THE CONTINENT: What the American infantryman will carry as emergency rations: Unlike the British 24-hour pack, the American rations for the new invasion of Europe contain no dehydrated food. Here are the contents of what is known as Ration K.: Breakfast—two packets of biscuits, a 3½-oz. tin of chopped pork and egg yolks, a fruit bar (like a piece of rich fruit cake), soluble coffee, sugar, chewing-gum and four cigarettes. Dinner—two packets of biscuits, a 4-oz. tin of processed cheese with bacon, fifteen tablets of malted-milk dextrose and dextrose tablets, lemon juice powder, chewing-gum and four cigarettes. Supper—two packs of biscuits, a 3½-oz. tin of corned pork loaf, a 2-oz. bar of vitaminised chocolate, soup powder, sugar, chewing-gum and four cigarettes. Every American soldier will carry a heating unit, like the British "Tommy Cooker," as well as water purifying tablets. He will also be issued with three bars of special fortified chocolate, known as "Field Ration D." The rations are packed in three waterproof boxes

Jean Hérold-Paquis, Paris quisling, amplified matters by broadcasting that "Western Europe will be turned into a heap of ruins by the German High Command when the Allies invade the Continent. It has decided to apply a scorched earth policy." Paquis picked out all road and railway communications and all establishments—wide term—which might serve military use. "All will be turned into a heap of rubble. Thus the Allied armies will need a whole army of specialists alone."

The theme was taken up by Déat, who has been exhorting Parisians to leave the capital. "Paris is in real danger," warned this one-time Liberal. But Déat attributed the city's peril to the sky. "The French Administration is riddled with pro-Allied men, who can only see things from a pro-British angle. They feel certain that Paris will not be blitzed like Berlin." And how right they are, these belatedly pro-Allied men! But if you care to read Déat's warning alongside reiterated reports that Paris has been copiously mined, another deduction is possible.

What substance may there be in this, which Berne and Stockholm have been putting out? "The Germans have mined the whole of Paris, and if ever they carry out their wrecking plan not much will remain of the city. Thousands of tons of dynamite have been placed throughout the city." It may read like tall talk, yet the extraordinarily powerful arrival of the land mine in this war should circumscribe any tendency to pooh-pooh the whole business. It could even be in the German mind to cripple Paris during a hectic spell and then proclaim that Allied bombers had done it—hence Déat's advance incursion.

However we may reckon the possibilities, let us hope that there are many mayors on the Continent of the same stamp as Theodore Broch of Narvik. You may recall part of this staunch refugee's Postscript: "People in Norway might be lucky to live in barracks and tents when the Huns have withdrawn. They might be lucky to have their meals in soup-kitchens. Doctors, hospitals, schools, all may have gone. We who go back might meet our countrymen on the scorched earth of our homeland as once the settlers met on the prairies with only the pattern of a free society in their hearts."

The Germans may be brandishing their mining plot so as to get into a position where they can hope to bargain when things come to the pinch with them. "We will blow up city after city to compensate for ours unless you call a halt and negotiate." But it must be admitted that a more probable interpretation is that they do mean to mingle demolition on a huge scale and away beyond strict military requirements, with legitimate rendering of successive battle zones as difficult as possible for the Allies to advance through.

There are such strong reasons why the Germans should do this—from their desperate and revengeful standpoint. The wholesale destruction would all too clearly present the invaders of Europe with problems of communications and civil administration capable of holding up entire campaigns, and this might lead to trouble with the inhabitants and even the Governments concerned. In a wider sense, the scorching might ignite revolutionary chaos in which the Germans could hope to fish, and anyway, their Führer has sworn to produce precisely this chaos and desolation far and wide should Germany have to go down.

Thirdly, the wrecking would enable Germany and her ruined cities to start the post-war period on a par with the lately-occupied countries and their ruins.

The prevention above all others lies, of course, in swift, surprise moves when we invade. So much was recently proved again when the Cossacks swooped into Sarny, which had been all prepared for demolition.

Air power gives the Allies a further means of at least trying to curb indiscriminate destruction, should the Germans resort to it. There will still be areas in easily-attainable Germany, inhabited by millions of people and untouched by bombing. These towns, townlets and even villages could be systematically bombed, and the reason for it broadcast to the German people.

Whether warnings would serve any useful purpose is debatable. We started warning the Germans when they were sitting at Calais, ready to invade us. Since when, Whitehall has sent out warnings east and west and south and north. Yet it would not exactly be a warning, rather an advice, if we were to inform the Germans at the apposite moment that Allied victims of scorched earth in the West, not adjudged to have been a strict military necessity, will have the right to call on German labour and materials for rebuilding, should they so choose.

There might even be some point in considering the actual men who will put the great Nazi mining plot into operation, if and as orders come to that effect. These will presumably be Pioneers. The B.B.C. regularly addresses German soldiers. As part of this service, Pioneers in the West might be told at the proper time, that alleviations will be granted to detachments which omit to execute non-military demolition in the scurry of retreat. Cases have occurred when Pioneers have unaccountably left buildings standing, and the suggestion has followed that they had been in touch with the local Underground. That provides another angle.

SOVIET BOMBERS FLY WESTWARD

Some Pictures Illustrative of the Work Carried Out by the Red Air Force on the Russian Front

THE COMMANDER OF A BOMBER FORMATION, Colonel Shaposhnikov (Hero of the Soviet Union) is plotting out the route for his pilots. He and his officers—Colonel Tikhonov (Hero of the Soviet Union—on right) and Captain Kuriatnikov (Hero of the Soviet Union)—mark the targets and plot the route which the bombers will shortly be taking towards the German line

THE NIGHT BOMBERS ARE READY FOR FLIGHT, the engines have been started, the pilot is waiting for the signal to take off

THE MEN WHO WORK ON THIS PLANE HAVE DONE A GREAT DEAL. This is the third year that gunner-wireless-operator Klishin, pilot Kuriatnikov and navigator Roshchenko have been flying together. They have bombed Berlin, Budapest, Danzig, Konigsberg and Ploesti, and they have carried out 200 long-distance flights without a serious accident or loss

THE SIGNAL IS GIVEN: THE BOMBER TAKES OFF WITH A ROAR, and soon it will be seeking out its strategic target in the German rear. Most of the Soviet bombers work in close collaboration with the Army

ROSHCHENKO, THE NAVIGATOR. This boy of twenty-two has already received the highest decoration in the Soviet Union—the Order of Lenin

AFTER THE OPERATION IS CONCLUDED. The bombers return in formation to the aerodrome by daylight after a long flight over hazardous enemy territory

The Soviet Air Force has evolved the closest co-operation with the Red Army, to the extent that air superiority is now established wherever the Russian armies move. In the east as in the west, the *Luftwaffe* has been beaten out of the skies. In fact, Russian fighter and anti-aircraft defences have proved so formidable that none of the big cities of the Soviet Union have recently had to suffer raids on the scale of the earlier *Luftwaffe* attacks.

Tank-fighter co-operation has been the principal strength of Red Army tactics from the start. The "tank busters" are still shooting up "Tigers" and "Ferdinands," but in the most recent phases of the war, Bomber Command of the Red Air Force also has put in a very impressive appearance.

The Russians have big bombers capable of flying very long distances. Raids on Ploesti, Constanza, Berlin, Konigsberg, Danzig and other cities under Nazi domination are proof of this; but, on the whole, when Soviet bombers fly westwards it is not for very long-range attacks. The Soviet Air Force generally operates on a narrow sector of the advance. During the day three or four massed raids are made by a force numbering some hundreds of planes; then the same area is "treated" by bombers at night. The bombers tackle their objectives in groups of several dozens, wave by wave.

In a vast land war, the principal targets for Russia's night bombers must be enemy communications, marshalling yards, concentrations of troops, transports, munitions. To-day the night bombers are fighting over the Western Ukraine, White Russia, Latvia, Poland. Soon they may supplement Anglo-American raids from the west by heavy attacks on Eastern Prussia and Silesia

THE THREE CROSSINGS OF THE GARIGLIANO RIVER AND WHERE THEY WERE MADE BY THE FIFTH ARMY just before the new landings on the Italian west coast at Nettuno, to the south of Rome. As a result of these crossings, three considerable bridgeheads were established at the points indicated in the drawing: a fourth area, around Argento and Punta Fiume, was occupied as the result of a landing made from the sea. These assaults across the Garigliano were so timed, and made in such force, that they caused the Germans to rush troops from the north to meet the new threat to the "Gustav Line": when this had been successfully achieved, General Alexander then launched his sea-borne invasion around the Nettuno area—*Drawing by Percy Home* (See notes below)

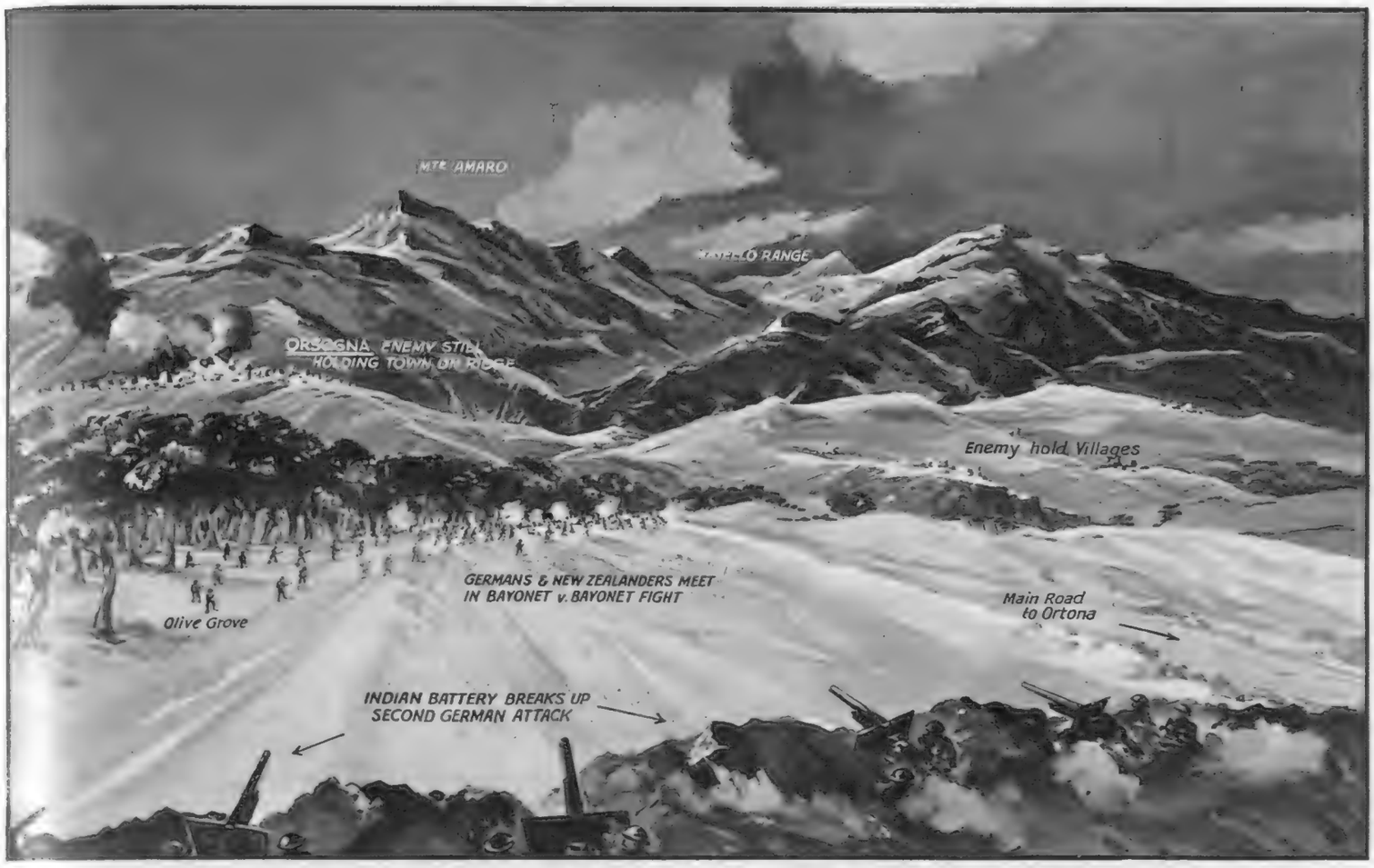
THE CENTRAL ATTACK ACROSS THE GARIGLIANO RIVER. The high river-banks at this point proved difficult for our tanks and other vehicles, but the use of smoke operations. The enemy occupied the rising ground beyond the meadows, and the railway bridge to the right was under concentrated shell-fire: booby-traps of ferry-boats across the river, our bridgeheads were consolidated firmly—*Drawing by H. P. Burton* (See notes below)

Upper drawing—Coincidentally with the preparations for the new landings at Nettuno, to the south of Rome, a triple assault was made by the Fifth Army upon the German positions to the north of the River Garigliano, after previous paratroop crossings had ascertained the nature of the enemy's defences. Three bridgeheads were formed when the actual assault took place, the more westerly one being by boat in the area of Punta Fiume and Argento, at the mouth of the river.

The stretch of river-front attacked measured from seven to eight miles. The boats and landing barges came under enemy fire at all points, but the use of smoke-screens proved effective in screening the troops as they scrambled ashore. The forces landed at Punta Fiume spread out in the direction of Minturno, the white buildings of which could be discerned amid the flashes of the bursting shells. The neighbouring villages of Trimonsuoli and Tufo were also occupied. The enemy fought back fiercely in the central section with mortar and shell-fire, the landing-craft coming under hot fire. The third landing took place in a more confined area, the hills coming down to the river's edge both to left and right. The assault troops passed San Lorenzo to the villages of S. Cosmo, Damiani and Castelforte.

Lower drawing—The establishment of the central bridgehead was accomplished in its initial stage with little loss, the actual banks of the river being undefended by the enemy. This enabled our boat parties to land and deploy successfully. The railway bridge area on the right, where the single-track railway to Capua crosses the Garigliano, proved to be under pin-pointed fire from enemy guns and mortars. As the troops advanced over the rich river meadows, increasing opposition was met with. Everywhere mines had been strewn, together with numerous booby-traps. All this flat meadow-ground was eventually cleared and occupied.

As the hours passed, the ferry system of boat traffic continued; the steep northern bank of the river made the task of unloading material none too easy at certain points, but the stream of material passed across successfully in spite of enemy fire. Some of the fiercest fighting took place to the left of this area, where the main road and rail bridges crossed the river. Both had been destroyed by the enemy: away to the right other troops fought their way past San Lorenzo to the village of Suis, which stands on high ground at about 500 ft.



WHILST THE GARIGLIANO RIVER, ON THE FIFTH ARMY'S FRONT, WAS BEING CROSSED, the Germans held on with desperate tenacity to the Ortona Ridge, on the Eighth Army's right wing—*Drawing by E. G. Lambert*

After the crossing of the Sangro River and the extension of the bridge-head area up to the Orsogna-Ortona ridge, it seemed at first that difficulties were over in this particular sector. The town and port of Ortona was entered by the Allies after the fiercest fighting: but, with this vital point gained, progress became very slow. The weather settled down, and although the enemy was never allowed to sit comfortably in his dug-outs, the forward pace slackened. The enemy was able to hold on to Orsogna in spite of constant harrying: but when he attempted a movement along the road, he was met and thrust back in a bayonet v. bayonet struggle by New Zealanders. Indian gunners were able to take their share in preventing this minor thrust from developing. But the ding-dong condition continued. Wind and rain swept the higher roadways, and then came the heavy winter snows. Above the Eighth Army stood the white sentinel of Mount Amaro, its frosty cone as clear-cut as a diamond in the sunlight

screens proved effective during the course of the and mines abounded. But, with the constant stream

TRIPLE CROSSING of the GARIGLIANO

Whereby the Germans were Lured Southwards Whilst the Fifth Army Landed at Nettuno

On the Ortona Ridge the Battle Line Remained Static *Special Sphere Drawings*

SAPPERS AND PIONEERS KEEP THE FIFTH ARMY MOVING ON THE ROADS TO ROME: Looking from a hillside into the workings of a roadside quarry whence road materials are obtained

Royal Engineers and Pioneers are doing a grand job of work on the ever-lengthening Allied lines of communication and supply. Havoc has been created on the roads in Italy by, firstly, Allied bombing and shelling while the enemy were in occupation; secondly, by the mining and blowing-up of the roads by the retreating Germans; and, thirdly, by the climatic conditions of the Italian winter. Every existing road leading to the Fifth Army front has now been repaired, and many new ones built. To save time and the use of transport on the already congested roads, roadside quarries have been opened up, and use has been made of the abundant Italian rock on the spot

THE LANDING OF JAPANESE REINFORCEMENTS FOR COUNTER-ATTACKS ON AN ISLAND POSITION already seized by the Allies. They are put ashore, right on to the beach, in shallow boats and go into action without the slightest delay—*Drawing by Wm. McDowell*

The landing boats used by the Japs are of different types: usually they are about 50 ft. long, and carry about 110 men at a speed of 10 knots. Twin keels provide the necessary stability and they draw only 3 ft. The ramp opens forward on to the sandy beach: the engine (and the coxswain) is usually protected by bullet-proof plating. The other types of landing craft are smaller; some have a draught of only 30 ins.; one type is driven by an aeroplane propeller. These vessels advance in large numbers at the same time: many are sunk, but the others reach the beach high up on the sand. The leading Jap soldier leaps ashore, runs up to the barbed wire and unrolls across it a long bamboo mat: this makes a carpet for the soldiers following. The troops carry light machine-guns and stick grenades. Once their bridgehead is established they then get their heavy equipment ashore through the surf

THE JAPANESE METHODS OF COUNTER-ATTACK IN THE PACIFIC

And their Tactics against the Americans in the Island Warfare in the Gilberts and New Guinea

—With Special Sphere Drawings

The Japanese are as formidable in defence as they appeared invincible in attack. As they made their way irresistibly down Malaya, overwhelmed Singapore, thrust back the British forces in Burma, swept over Java, gathered up the whole wealth of the East Indies, it seemed as if nothing could stop them. The scattered, ill-defended islands fell at their approach, till they threatened the great continent of Australia, which had always refused them entry as immigrants.

Their onward march of victory lasted almost unchecked till, in August 1942, the American Marines made their audacious landing on Guadalcanal, in the Solomon Islands. From that moment Japan has been on the defensive, seeking to hold the vast empire she had seized so easily.

The Japanese High Command in Tokyo maintain a war policy which is at variance with that of Western military authorities. They do not hold with any theories of retiring to new positions to shorten their line, or to evacuate from an untenable area, or to allow surrender when conditions have become impossible either through lack of ammunition or food. The wide-flung territory, acquired so rapidly and easily during the first eight months of their campaign, must all be held—to the last man. This policy has meant great losses in ships, men, material, but Tokyo will not "cut its losses," and continues to insist upon holding all it had once gained, hoping to wear out the Allies by the slow process entailed in mopping-up pockets of Japanese troops. They have been supported by the limpet-like qualities of the individual Japanese soldier, who can endure fatigue and the deprivation of all common necessities to a greater extent than the Allied troops.

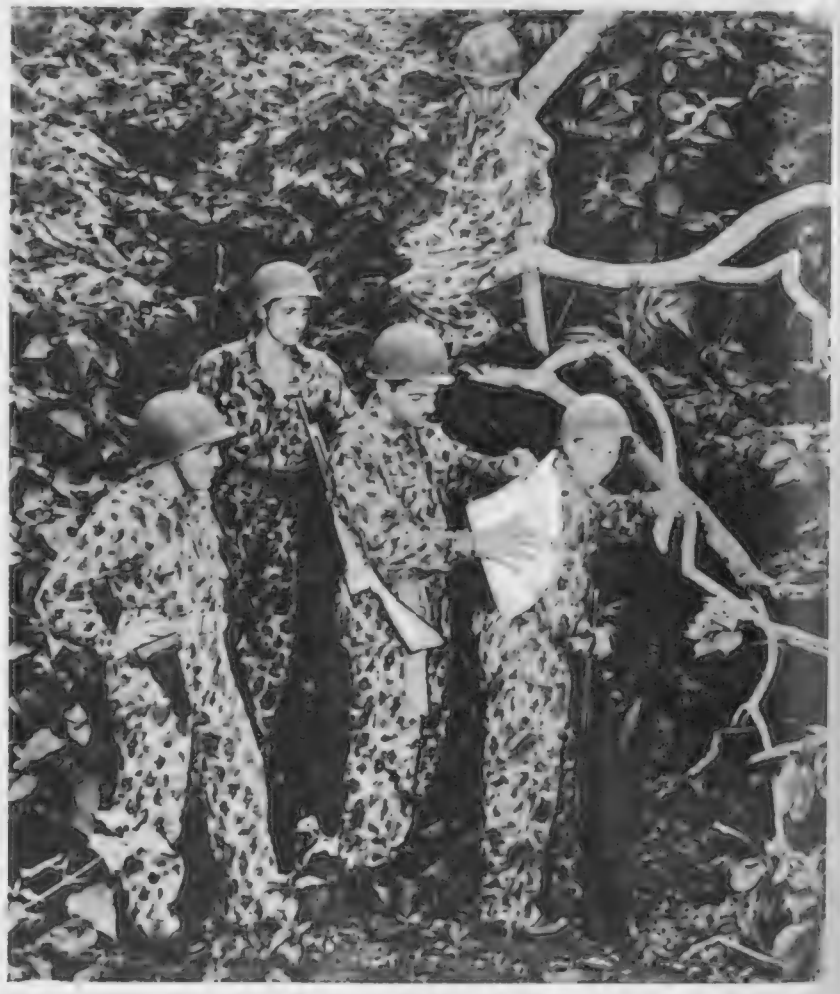
On the Gilbert Islands the Japanese troops, well knowing that there was no retreat or hope of reinforcement, and vastly outnumbered, died to a man, making the capture of the tiny island of Tarawa very costly to the Americans. At Lae and Finschafen, in New Guinea, and on Bougainville Island, it was fully anticipated that there would be a large haul of prisoners. "Twenty thousand hopelessly trapped" were the headlines—but when Lae and Finschafen were entered the prisoners were not there. Prisoners are occasionally to be reckoned in scores, but never in hundreds or thousands. The elusive Japanese had kept up a desperate frontal defence behind which the main body had crept away.

At Cape Gloucester, in New Britain, the Americans made a successful landing, gaining their objectives of airfields by December 26—but over a month has passed and the Japanese forces are still holding out near Borgen Bay, to the east of the Cape. They can get no relief from Rabaul or Gasmata, and the attempt to bring supplies by barges proved fatal to the barges. Yet, hopeless as the position seems, the enemy fights on, even daring to make counter-attacks.

When Finschafen fell on October 3 last year, it was confidently expected that the Japanese High Command would order a retreat from the whole Huon Peninsula, which was then open to attack from land, sea and air. According to Western military ideas, it was untenable, but Tokyo thought otherwise, and the Australians were surprised by a sudden unexpected assault from the enemy, who dashed down from the jungle-covered mountains around Sattelberg, recapturing some villages for a time, threatening the Allied position. It was known that the Finschafen garrison had drifted away into the mountains, but it was conjectured that they would be making their way to the northern coast. Instead, they had joined up with reinforcements sent from Madang which had landed on the coast, pushing over the Finisterre mountains, to come to the assistance of Finschafen.

Madang and Wewak, the two important air bases on the north coast of New Guinea, send out barges each night to carry reinforcements and supplies, a few of which succeed in bringing help to the outlying places. A large number of these barges have been sunk by Allied planes and the watching motor torpedo-boats, who have allowed few to escape them. A successful landing of American troops at Saidor, east of Madang, cutting the land route, has not altered the Tokyo policy, and the Japanese troops cling on, even when deprived of nearly everything which Western forces find necessary.

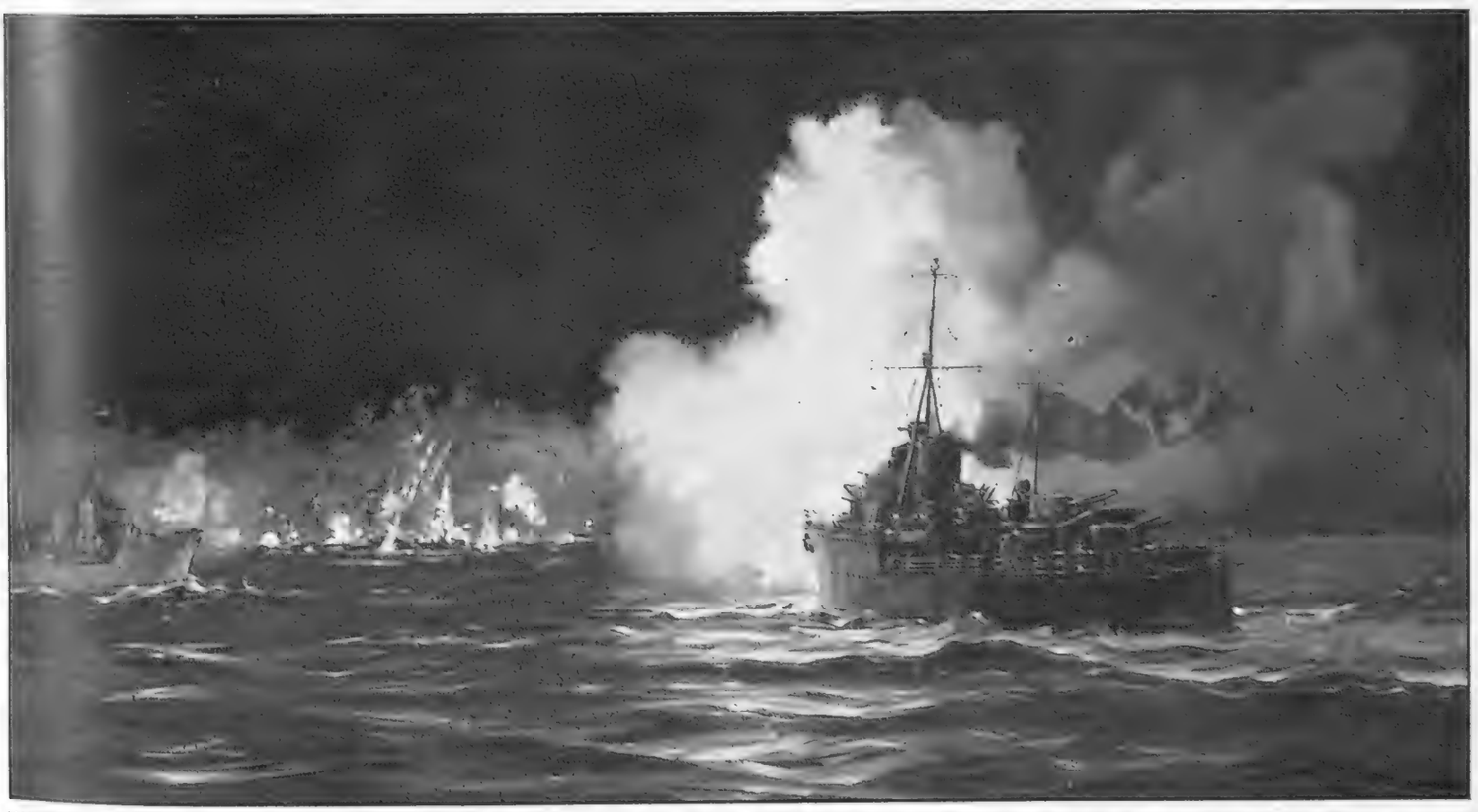
BLASTING THE JAPS (LITERALLY) OUT OF A SNIPER'S PILL-BOX on Tarawa, in the Gilbert Islands. Two Marines (in the centre) are barely visible, owing to the camouflage suits they are wearing as they shelter behind the stumps of palm-trees and hurl their explosives



THE CAMOUFLAGE SUITS WHICH THE AMERICAN TROOPS WEAR IN THE PACIFIC WAR ZONE. The Japs have declared that they intend to treat as "spies" any captives who fall into their hands clad in these suits. Do not omit to notice the man hidden among the branches of the trees!

THE JAPS COUNTER-ATTACK TO REGAIN THEIR LOST STORES AND EQUIPMENT in the Cape Gloucester area on the north coast of New Britain: the fanatical assaults in massed formation made by their (possibly doped) "suicide squads"—*Drawing by W. G. Whitaker*

Soon after the Americans have landed and established bridgeheads in the Pacific Islands, the Japs counter-attack with great violence, apparently unwilling to "cut their losses" in any way. In the Cape Gloucester area, eye-witnesses have described how "suicide squads" would hurl themselves against a wall of bayonets and a hail of machine-gun bullets in the vain hope of regaining their lost positions. The attack would come at dawn—a rush uphill against point-blank fire: their ranks would thin, but still they would come on. The remnants which reached the American positions fought desperate, man-to-man bayonet fights. So fanatical are these charges that the American Marines think that the Japs are doped with opium. Their aim is to regain twenty dumps crammed with ammunition, food and clothing taken by the Americans after their landing at Cape Gloucester on Boxing Day. The Japanese evidently regarded the dumps as vital to their supply strategy in the area, and they continued to make vicious day and night attacks to get them back



WARFARE BY NIGHT: ALLIED WARSHIPS SURPRISE A FLEET OF JAP LANDING BARGES on the New Guinea coast and send in a storm of shells, to destroy barges, soldiers and the enemy installations on the shore—*Drawing by Wm. McDowell*

Throughout the Islands, and along the extended coastline of New Guinea, scenes like the above are being frequently enacted. Large concentrations of landing barges, conveying Japanese reinforcements to sorely-pressed garrisons, are surprised by warships at night and by aircraft by day. In each case, the enemy suffers real punishment: thousands of Jap warriors must have been destroyed in this fashion. The incident depicted above occurred in the Saidor area of New Guinea: racing among a string of barges, the Allied warships sent seven, crowded with troops and supplies to the bottom straightway, and then destroyed another four. On the same night great destruction was also caused among other barges at a barge base and bivouac area nearby. By day, during the same period, twenty-nine barges, mostly full of men, were destroyed or left unserviceable by aircraft during fighter sweeps along the coastal regions

C

AROUND THE BATTLEFRONTS OF THE WORLD

NIGERIAN MINES PRODUCE AN IMPORTANT MINERAL FOR AIRCRAFT CONSTRUCTION: A view of a "paddock" at the Pengal Camp Mine. Labourers are removing the overburden concealing the wash in which the tin concentrate lies 15 ft. below the surface of the ground. Northern Nigeria is now producing Columbite, a mineral in great demand for the production of special steel used in aircraft construction. Columbite, a complex ore of niobium and tantalum, is found in conjunction with casserite, from which tin is derived. Until recently it was regarded as of no commercial value. Its rise to importance has reopened many mines and given employment to many Nigerians, who work on two systems—"Tributing" and "Company work." In "Tributing," headmen are issued with tools and find their own gangs, who work in their own time, selling the results of their weekly labour to the mine managers. Company work is, of course, paid for on a time basis. Mining for tin and other minerals in Nigeria is mostly alluvial, the mineral being concentrated near the surface by the action of the water. Excavations are called "paddocks," and often extend for acres. These two pictures were taken at the Minerals Research Syndicate's Pengal Camp Mine, in Banchi Province of Northern Nigeria

"TRIBUTORS" HAVING THEIR TIN CONCENTRATE ASSESSED BY THE MANAGER OF THE MINE. A cigarette tin is the common measure: if the sample weight is below a fixed standard (in this case 11 lb. 10 ozs.), it is not accepted. The low weight indicates that the concentrate has been cleaned up to the required standard

ANOTHER U-BOAT IS BEING SENT TO THE BOTTOM: A fountain of spray from a depth-charge rises high, while machine-gun bullets kick up splashes as the planes swoop in low to press home the attack

THE U.S. NAVY'S NEWEST WARPLANE IN ACTION. These are Hell-divers, the newest dive-bombers. These planes first went into action on November 11, 1943, when a squadron of twenty-three attacked the Jap base at Rabaul, in New Britain. Despite opposition from a force of Jap Zeros estimated at eighty, they sank one enemy light cruiser and a destroyer, probably sank a heavy cruiser, heavily damaged another light cruiser and probably damaged a destroyer. The Hell-divers are bigger and heavier than earlier Navy dive-bombers and are capable of carrying a heavier load over greater distances

SMOKE POURING FROM THE CONNING-TOWER OF THE SUBMARINE before the vessel goes to the bottom in mid-Atlantic. These two pictures were taken as bombers of the U.S. Navy and Army concentrated on a German underwater raider in the Atlantic. Depth-charges and demolition bombs sent the craft to the bottom. The U-boat was attacked from the air from a low level, and these two striking pictures show the accuracy of the bombing. In the lower picture, the splashes seen in the foreground were made by machine-gun bullets from the attacking aircraft

AN AMERICAN-BUILT SHIP JOINS THE FRENCH FLEET. The destroyer-escort *Marocain*, the fourth warship to be presented to the French Navy by the United States, takes the water at her launching at an American yard on the Atlantic coast. The vessel was christened by Miss Anne Bullitt, daughter of the former U.S. Ambassador to France and Russia, in honour of the French Moroccans now fighting side by side with the Allies in Italy. Vessels of this type, of which a number have recently been built in the United States, have played a large part in the anti-submarine campaign

THE CHINESE MISSION TO GREAT BRITAIN VISIT MR. CHURCHILL, at No. 10 Downing Street. They were introduced to the Premier by Dr. Wellington Koo, Chinese Ambassador. From left to right are—seated: Wang Yun-Wu, Dr. Koo, Mr. Churchill, Wang Shih-Chieh and Hu-Lin. Standing behind are—Wen Uyan-Ning, Han Lih-Wu and Li Wei-Kuo

THE TWO BRITISH GENERALS AND AIR MARSHAL WHO ESCAPED FROM ITALY—Lieut.-General R. O'Connor, Air Marshal O. T. Boyd and Lieut.-General P. Neame, V.C., photographed after their arrival at Algiers. These three men, who escaped from their P.O.W. camp, are now in Britain, which they reached via Algiers. Air Marshal Boyd was captured by the Italians in November 1940, when his plane made a forced landing while he was on his way to take up his new appointment as Deputy to Viscount Wavell, then C.-in-C., Middle East. General O'Connor and General Neame were captured together in April 1941, when they were held up by a German motor-cyclist armed with a tommy gun while their staff car was leaving Derna for a new H.Q. The three senior officers took advantage of the confusion among the guards at their camp when the news of Italy's capitulation came through. The method of their escape is still a secret

ADMIRAL MOUNTBATTEN VISITS THE ARAKAN FRONT. The Supreme Allied Commander in South-East Asia is here seen chatting with men of the R.A.F. British forces in the Maungdaw area of Burma are making a steady advance in the face of stubborn Japanese resistance

A PICTURE FROM THE EASTERN FRONT JUST RECEIVED THROUGH A NEUTRAL SOURCE: It purports to show German Grenadiers returning with their "storm guns" to their positions "after a successful counter-thrust" against the Russians. The "storm guns" appear to be our old friend the tank!

On left—**H.M.S. "SAUMAREZ" puts out to sea for a patrol in northern waters, with H.M.S. "Mahratta" coming up behind.** *Saumarez* was one of the four destroyers which intercepted the *Scharnhorst* when, damaged by gunfire from British cruisers, the battleship was running for cover. With the *Savage*, *Scorpion* and *Stord*, H.M.S. *Saumarez* went in practically unsupported and delivered crippling torpedo blows. The *Scharnhorst* was slowed up and the *Duke of York* was thus enabled to catch up with her and administer the *coup de grâce*

THE FORMER RUMANIAN KING HOLDS A PRESS CONFERENCE in Mexico City and explains his attitude with regard to the Nazis. Ex-King Carol (on right of picture) had scheduled to deliver a radio broadcast to America. This was cancelled, however, and the exiled King then held an "informal Press conference" to explain his stand regarding the Nazis. Since leaving Rumania ex-King Carol has been trying to impress his views on the American public—so far without success, as his political record has been far from satisfactory concerning his former Fascist tendencies. Note in this picture the large framed portrait of Madame Lupescu hanging on the wall of the ex-King's residence

DESTROYERS in WINTER: The Bitter Weather Conditions at Sea during the Dark Months in the Arctic Circle and in the North Atlantic

AT this time of year the maintenance parties responsible for the upkeep of our warships are working overtime, especially in the case of destroyers whose duties give them the smallest of respite from the winter weather.

Winter conditions in the Arctic and North Atlantic in particular provide the severest test which could possibly be devised for ship and crew alike, and one of the highest tributes that can be paid to the soundness of British shipbuilding is to be found in the way in which such vessels as the old "V" and "W" destroyers, now over twenty-five years old, still stand up to winter conditions of gale, high seas and ice.

The bulk of the inevitable winter damage to these little ships occurs to deck fittings of every kind. In fact, it would probably be no exaggeration to say that in any destroyer which is on winter duties in northern waters most of the fittings on the upper deck can be expected to be buckled or otherwise damaged more than once in the season through heavy water coming aboard.

In bad weather, damage of this kind is liable to be increased more or less in proportion to the ship's speed. When fighting against a head wind and sea, a ship can be made considerably more comfortable by reduction of speed. At times such a reduction may not merely be a matter of comfort: the very safety of the vessel itself may dictate it. But a warship may often, by the nature of her duties, be unable to make any concession of speed unless it becomes absolutely imperative.

Despite the inevitable damage to the upper works, it is amazing how the hulls themselves stand up to the tremendous winter stresses. Another point of interest is that, in the view of many destroyer men, it is not necessarily the most modern classes of destroyers that make the best "sea boats." I have known quite a few destroyer officers who preferred the rough-weather behaviour of an old "V" and "W" to that of the far bigger new types, some of which are more like a miniature cruiser than a destroyer.

But, however great the buffeting, however much the superficial damage which conditions in the northern winter may cause, it is very seldom indeed, whether by what passes for daylight in the north or by night, a destroyer captain has occasion to fear for his ship. Perhaps the most trying conditions he is likely to experience are those in which ice forms in solid masses on the upper deck. In the Arctic, this ice builds itself up at an alarming rate, encrusting guns, decks, bridges and funnels. Apart from the difficulties which this creates in working and fighting the ship, it adds a tremendous weight in the wrong place. This weight can easily become so great that it seriously upsets the ship's trim and stability.

Another difficulty created by ice is for the gunners. Cases have been recorded where, under heavy attack, the gun crews have had to clear the ice from the breeches of their guns after every round fired.

Let us turn for a moment from what winter weather does to the ships and see what it means for the crews. On deck and on the bridge the cold is piercing. Sleet, frozen spray and hail lash the face. The bridge of a destroyer gives the minimum of protection from the weather. There is, in fact, precious little more than a breast-high plating round the bridge platform. If there are glass screens against the wind, it is more than ten to one that they will have to be lowered out of the way, because otherwise they would become iced-up and obscure the vision.

Below decks, in a contrast which gives almost a physical shock, the atmosphere is hot and damp. In really bad weather, there may well be as much as 4 or 5 ins. of water swilling ceaselessly over the messdecks, which form the crew's living quarters.

It is no uncommon thing for officers and men alike to go without a hot meal for days on end. In even moderately bad weather cooking becomes difficult. In really heavy seas it is impossible. On these occasions the cooks will miraculously produce hot cocoa, thick and sweet. This, four times a day, together with bully-beef sandwiches and ship biscuits, will be all that anyone will get.

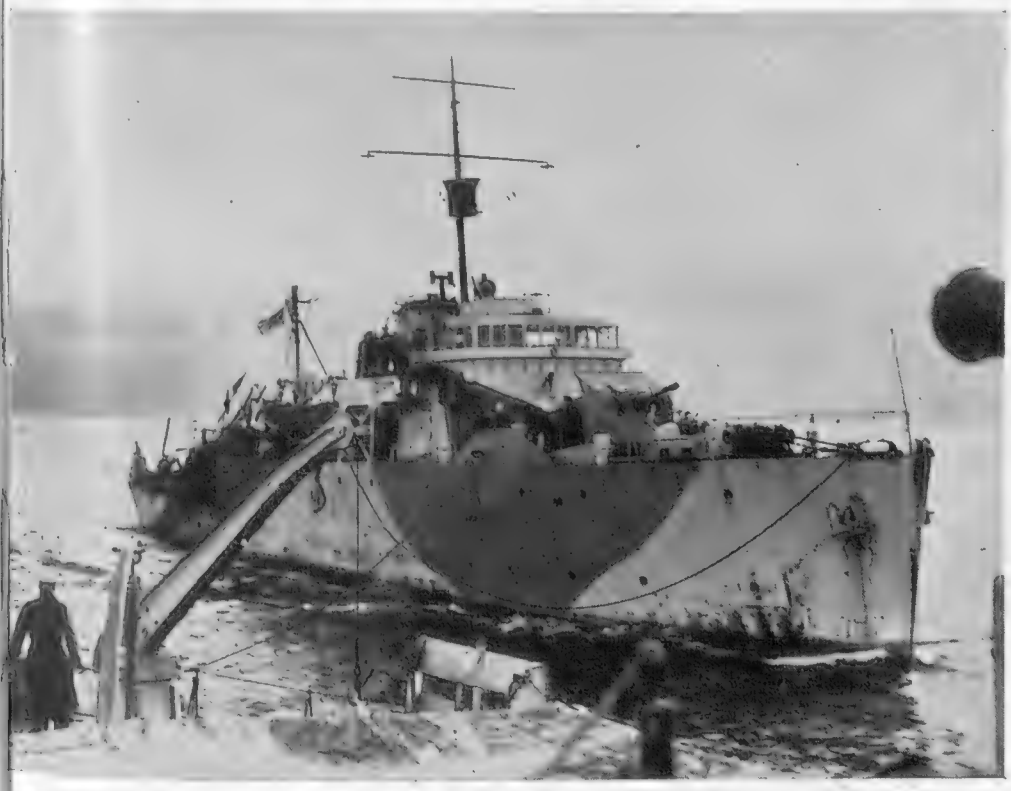
ON PATROL IN NORTHERN WATERS: An impression of the destroyer "Milne" (1,935 tons; 4·7-in. guns; 36½ knots speed), with her decks awash as she ploughs through heavy seas

WHEN THE SPRAY TURNS TO ICE: A deck scene aboard H.M.S. "Milne" after a northern patrol

OUR SMALLEST MODERN DESTROYERS IN A VERY ROUGH SE
have a displacement of only 904 tons, and a length of 272

BIRTHDAY PARTY ABOARD A VETERAN DESTROYER. H.M.S. *Mackay*, a British flotilla leader on duty in "E-boat Alley," off the East Coast, recently celebrated her twenty-fifth birthday (she was launched on December 21, 1918). A silver jubilee is a date to mark: and her officers and men (amongst whom are many Scots) had a party—or two or three parties—when they came into port. This picture was taken in the wardroom as toasts were being drunk. Bunting and flags made the decorations: the candles were oversize, but the cake was "special"—it was made by a W.R.E.N., who used seven eggs on the job!

IN WINTER: AN ARTIST'S IMPRESSION OF TWO VESSELS OF THE HUNT CLASS being tossed about during a wartime patrol in a gale of wind. These vessels are fitted for minesweeping. Their speed is 27½ knots, and they are armed with 4-in. guns. Many of them have performed fine service during the present war.—*Drawing by Montague Dawson*



SWEEPING A SAFE ROUTE THROUGH THE SEAWAYS AROUND BRITAIN. H.M.S. "Dornoch" (one of the Bangor class of Fleet minesweepers) takes another vessel's line aboard and opens out to begin her task of sweeping up the German mines

On November 11 last, Mr. A. V. Alexander, First Lord of the Admiralty, said: "Enough mines have been disposed of by our minesweepers since the war started to have destroyed the British merchant fleet two or three times." Amongst the minesweepers to which he referred were the 750-ton vessels of the Bangor class, of which H.M.S. *Dornoch* (a picture of which is given on the left) is one. Most of these ships were built in Canada: they are 180 ft. in length and have a speed of 16 knots. They are armed with 4-in., 3-in. and smaller anti-aircraft guns; and they carry a normal complement of sixty. During the past year the Fleet minesweepers have escorted convoys, assisted in the destruction of U-boats and acted as rescue ships between their spells of minesweeping. Just before a recent amphibious exercise in which the Royal Navy took part in the Channel, these little ships swept to within six miles of the French coast and were under fire from the enemy's coastal batteries for seven days. Some of them (Canadian-built and named after small Canadian townships) have steamed an average of 28,000 miles since their commissioning

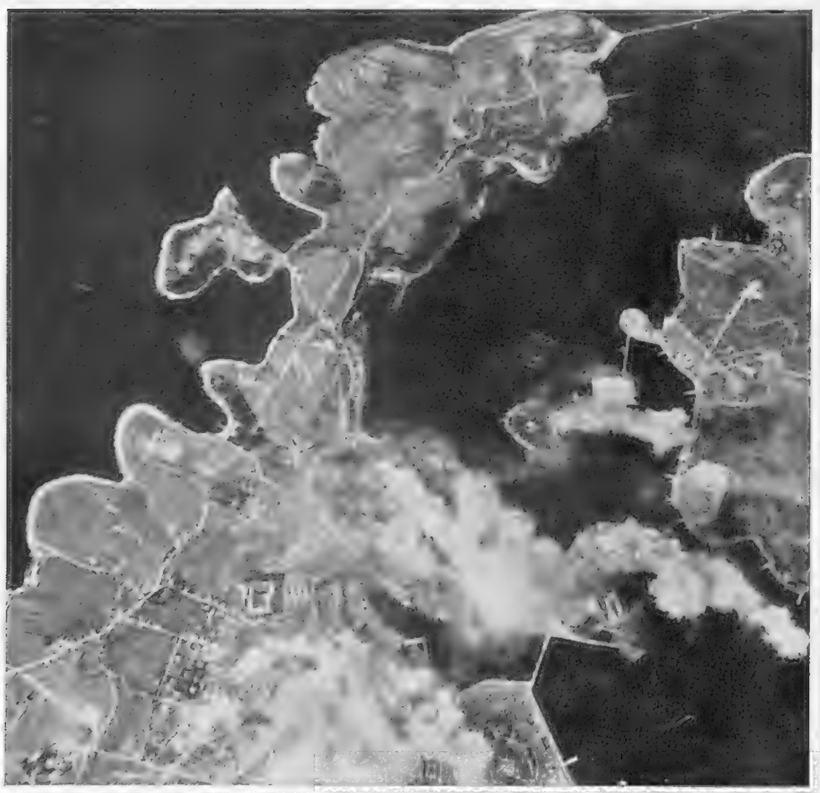
ON MINESWEEPING LOOK-OUT. Able Seaman V. Showler, of Stratford, London, at his post. In peacetime he was a billiards-table "sander"—and operated the slate-planing machine which produces the finished polished surface of a table before the baize is put on

BOMBERS OVER EUROPE

Recent Pictures from the Mediterranean Area, Showing the Ring of Fire Surrounding Italy

All the pictures on these pages were received within a few days of each other: all show operations by air in the Mediterranean area, and within easy reach of Italy. Before the Nettuno landings, strategic points were bombed systematically and many of the main communications with Rome were severed. As far off as Pola and Athens, Allied bombers have been probing the enemy's strong-points and helping to destroy his capacity to wage war. When considered as a whole, it will be found that each fresh raid contributes something towards the strategic pattern mapped out by the High Command

AT THE TOPMOST END OF THE ADRIATIC SEA. On January 9 Flying Fortresses of the Fifteenth U.S. Army Air Force carried out a heavy raid on the harbour installations in the important naval and shipping port of Pola, in the Istrian "Triangle" 40 miles to the south-west of Fiume. Here are some of the bombs falling down towards the water-front. The harbour and dock areas, as well as nearby factories, were pounded during the course of a six-minute attack by the big Fortresses. Heavy damage was done to the submarine pens and their adjoining shops, to the coal quay and sheds, to warehouses in the torpedo depot area, and to the machine casting and forging shops. In addition, a torpedo-boat and a merchant vessel in the harbour were damaged. Another view taken during the same attack is given on the left below



ANOTHER VIEW OF THE ATTACK ON POLA CARRIED OUT ON JANUARY 9. Smoke is here seen rising from the fires and explosions within the target area. At least three exceptionally large explosions were set off in the harbour by direct hits. Pola has been used principally by the Germans as a submarine base: it has also played an important part in the German supply system for the armies in the Balkans and in Italy. The Flying Fortresses which took part in this raid were escorted by long-range P38 Lightning fighters

ORTONA FROM THE AIR: A reconnaissance photograph made while Canadians of the Eighth Army were still battling for the town. Sherman tanks can actually be seen moving along the streets during "mopping-up" operations, in which they co-operated with the infantry. There is abundant evidence in this picture of the success of Allied air attacks on the town

THE BOMBING OF CIVITA VECCHIA: A flight of B25 Mitchells of the Twelfth U.S. Army Air Force are seen in the upper left of this picture turning out to sea after bombing the harbour: the photograph was made by an Allied reconnaissance pilot flying high above the scene of the action. Civita Vecchia is a highly strategic town on the west coast of Italy: it is the only port of any size between Naples and Leghorn. At the present moment—whilst our men are in action around Nettuno—its importance has been greatly enhanced. Hence its attention from the Allied bombing formations. The picture reproduced here shows in great clarity the enclosed harbour area, where many a large supply or troop ship might shelter in comparative safety were it not for the fear of Allied attack from the air

THE ATHENS-PIRÆUS DOCK AREA UNDER ATTACK ON JANUARY 11. The Piræus is the harbour for the City of Athens and a vital centre in the Axis supply lines to the Balkans and the Dodecanese areas. During past months it has received much attention from Allied aircraft. It was bombed by a considerable force of escorted heavy bombers on the 11th, and again the same night. A large explosion and several fires were observed. This picture was taken just after one of the big aircraft had carried out its bomb run: bomb bursts are seen covering the target area in the lower left just after the attack

ONE OF THE KEY POINTS ON THE ITALIAN EAST COAST. The town of Pescara, which has been heavily bombed many times, by daylight and by night. It stands on the Adriatic coast and is the terminal of the east-to-west road to Rome. Such places are "stepping-stones" for the Allied advance, and, as such, they are frequently mentioned in the Allied communiques. All are being subjected to never-ceasing and heavy attack from the air

GIANTS OF THE AIR: THE GREAT BRITISH TRANSPORT AIRCRAFT, THE YORK, compared with the American C46 Commando and the Lockheed Constellation. Based on the famous Lancaster bomber, the York can carry more than fifty passengers: alternative fittings allow for cargoes consisting of all freight or mixed freight and personnel *(see notes below)*—*Drawing by Roland Davis*

WHALES IN THE SKY

The "York" Transport Plane

—With some New Drawings and Photographs of Combat Aircraft in Action in Europe and the Pacific

The York is the aircraft with which British Transport Lines of the future will probably operate after the war. Its design has been evolved from the Lancaster bomber: both aircraft are made by the same firm, Avro's. It has four motors, which are sufficient to carry an enormous load over long distances—or, alternatively, a great number of passengers. The machine has a flying range of over 3,000 miles, and a top speed of over 300 m.p.h.: it weighs 30 tons. During a recent demonstration, four jeeps were driven into its interior: similarly, a whole Spitfire could be accommodated, suitably dismantled; or six aero engines (each weighing a ton).

The York has already made an Atlantic return trip. During the flight from Canada to Britain, in November last, it maintained an average cruising speed of 215 m.p.h. and completed the crossing in just under ten and a half hours. It has been stated that the York can cruise at a speed of 275 m.p.h., but—obviously—it would be far more economical from the point of view of fuel consumption to have a cruising speed of 200 m.p.h.

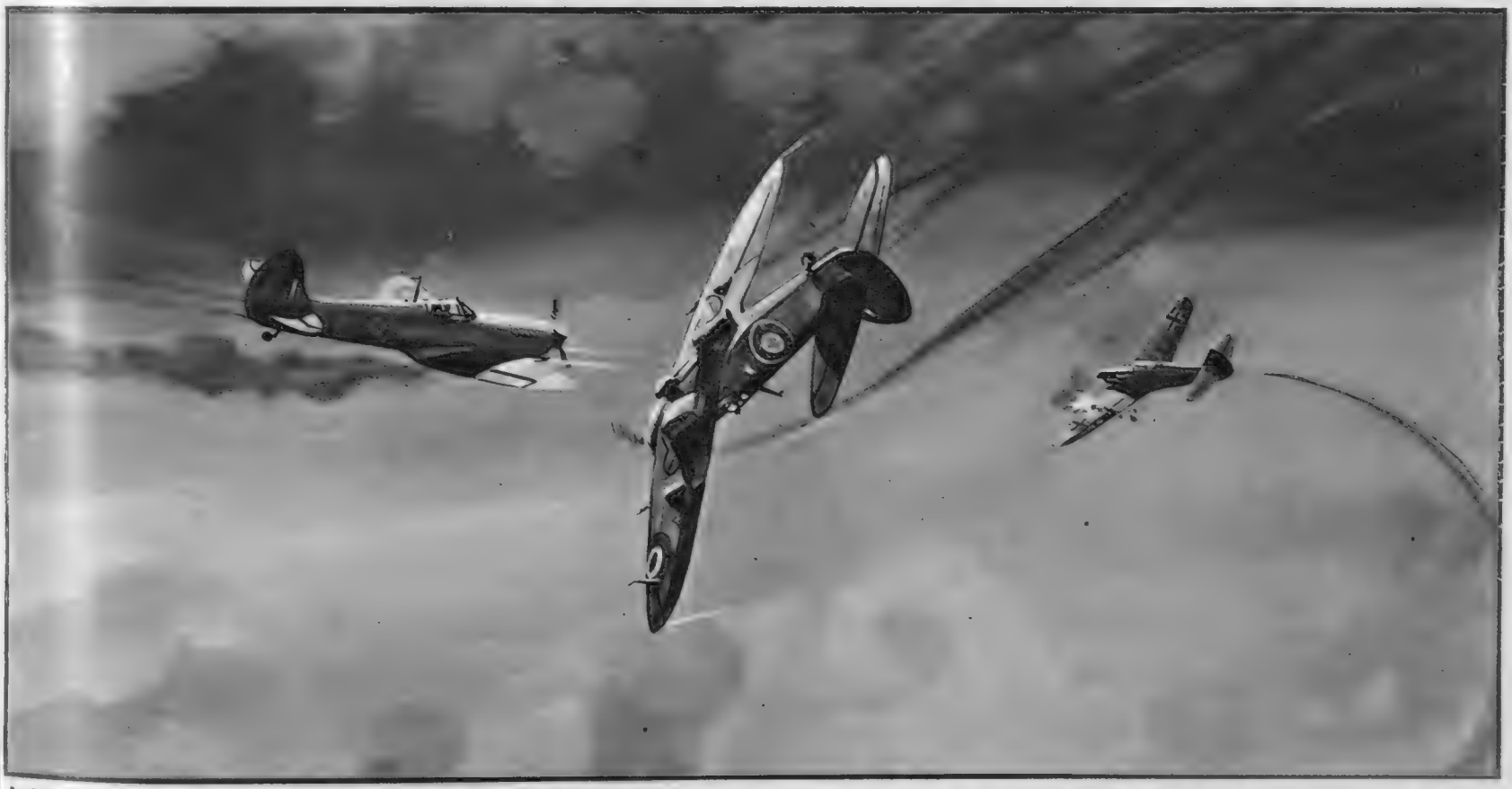
THE ALBEMARLE, BRITAIN'S "FLYING TRICYCLE," IN FLIGHT: This aircraft is now being used in England to tow gliders: it is the first operational-type aircraft built in this country to be fitted with a tricycle undercarriage. Built originally as a reconnaissance-bomber, this twin-engined mid-wing monoplane of composite wood and metal construction weighs 10 tons (unladen) and carries a crew of five. It has a normal range of 1,300 miles and a speed in excess of 250 m.p.h. at 10,500 ft. Twin fins and rudders are fitted. Large numbers of the Albemarle are reported to be ready for service

A WRECKED JAP PLANE USED AS A MACHINE-GUN NEST: This picture comes from the Pacific war zone: it was taken at Makin Island, and shows a big Jap flying-boat which was riddled by American fighter aircraft whilst it rode at anchor during the invasion of the Japanese-held base. Although the aircraft could not be flown, the enemy (in their last "do-or-die" venture, now so familiar a feature of Japanese tactics) used it as a machine-gun nest until all the men in it had been annihilated by the U.S. landing parties

LIGHTENING THE LOAD TO BRING AN AMERICAN BOMBER HOME: This B26 Marauder was recently delivering its bomb-load near the front line in Italy when its port motor was hit. (The propeller can be seen feathered in the picture.) The order was given to jettison everything removable to ease the strain on the remaining engine: a photographer in an accompanying plane caught the drama pictorially as cartridge belts were hurled out from one of the gun positions. Due to the skill of the pilot and the lightening of the aircraft the bomber was brought back to its home base safely

BRITISH TORPEDO-PLANES CATCH AN ENEMY CONVOY OFF THE NORWEGIAN COAST: an action in which Beaufighters demonstrated once again how they can break up the enemy's attempts to run supplies by sea—*Drawing by Roland Davies*

Beaufighters which recently attacked enemy shipping off the Norwegian coast hit two medium-sized merchant ships with torpedoes and damaged several escort vessels during the course of the action which our artist has illustrated here. During the attack the Beaufighters belonging to Coastal Command flew through heavy fire from the German escort vessels and shore batteries. As a torpedo struck the first merchant ship the airmen saw a column of smoke and water 50 to 100 feet high. The second merchant vessel was hit by an R.N.Z.A.F. squadron. An officer who took part said: "There was a large flash. One of the torpedoes went home. Then whitish smoke turned to black, and hung like a mushroom over the ship. Cannon hits were scored on other vessels." Seven Me.109's were sighted; three made no fewer than six separate attacks on one Beaufighter. It took violent evasive action and was pursued for 30 miles before shaking off the enemy. The Beaufighter suffered no damage and the crew were uninjured. One Me.109 attempted to interfere with our aircraft without success, and was last seen with one wheel down and black smoke coming from the engine



A 35-MINUTE AIR BATTLE OVER THE ADRIATIC: Two Spitfires operating over the sea attack and destroy a German Me.109 after a long chase—*Drawing by Roland Davies*

Two Spitfire pilots of the Mediterranean Coastal Air Force shared the destruction of an Me.109 after a 35-minute chase over the Adriatic. They are W.O. Peter Hoare, of Coulsdon, Surrey, and Flight-Lieut. Edward Warren Schrader, a New Zealander, of Mount Street, Wellington. Telling the story of the kills, W.O. Hoare said: "We first engaged another Me.109, which dived away and was lost sight of. We went after the second, and after I had got in a burst he broke towards the Flight-Lieutenant, whose fire I saw hitting him when I rolled over. For 30 miles the chase went on before my leader said 'I think we have got him,' but he did not go down. So I got close to him again and fired my last ammo. He jettisoned his hood and the next thing I saw was a big splash. He disappeared entirely, leaving no wreckage, only oil on the water." The Spitfire squadron to which these pilots belong has seen a great deal of action since going to Italy. Pilots have shot down eight enemy aircraft, with others probably destroyed, without loss to themselves over the Adriatic. The squadron has a total of fifty-five destroyed and many others probably destroyed.

AN "INDEPENDENT AMPHIBIAN COMPANY" OF THE R.A.S.C. at the mouth of the Sangro River on the Italian east coast. During the recent big battles of the Eighth Army, these Companies plied up and down the coast taking stores and supplies by sea to the front-line troops. By this means the badly-congested roads of the mainland were greatly relieved of strain (*See accompanying notes*)—*Drawing by E. G. Lambert*

AMPHIBIAN OPERATIONS

By the "Ducks" of the Eighth Army around the Mouth of the Sangro River

—A Note on a Little-known Role of the R.A.S.C. along the Adriatic Coastline

The Independent Amphibian Companies of the R.A.S.C. carried out a big job with the Eighth Army in Italy. Whilst the big battles at the Sangro River were at their height, one of these units carried supplies in their "ducks" over ground which the Army's normal transport could not negotiate, thus relieving the badly-congested roads. Working day and night, the men of the unit supplied the front-line troops with urgent material. In twenty-four hours they transported 700 tons to the forward elements; included in this total were 60,000 rounds of artillery ammunition, 45,000 rations and 15,000 gallons of petrol. On their return trips they evacuated the Allied wounded and many German prisoners of war.

Although they often put out to sea to reach the battle-zone, there are no naval men attached to the Company: in fact, in this particular unit there is not one man who had any seagoing experience before joining the Service! The pictures reproduced here were made when the unit was operating across the Sangro mouth between Fossacesia and Casal Bordino. (Incidentally, this Company took part in both the Sicilian and Italian landings.)

R.A.S.C. vehicles have always been divided into companies, which provide a transport pool to carry commodities like petrol and oil, ammunition and food. Operating with "ducks" along the Adriatic coast, they have been able to render conspicuous assistance in a novel manner. The "Ducks" are provided with fenders at the sides, a long towrope on a winch for emergencies and spare tins of petrol: the board in front is to stop splash. They weigh 2½ tons each, and have been built in the United States specially for combined land and sea operation

ON THE NORTH SIDE OF THE SANGRO: "Ducks" of the R.A.S.C. being loaded with casualties by members of the R.A.M.C. for transportation to the south by sea

"DUCKS" ARRIVING AT CASAL BORDINO for urgent casualties. In the background are the ambulances laden with the wounded awaiting their arrival

AN R.A.S.C. DRIVER WASHING DOWN THE DECKS OF A "DUCK." These remarkable American vehicles weigh 2½ tons: they can operate as lorries on land and as boats at sea

GREASING THE PROPELLER-SHAFT OF A "DUCK": This picture indicates how high the superstructure stands from the ground. The "duck" is driven by propeller in the water, and by wheels in the normal manner on the ground

The "DEADLOCK" on the Eighth Army Front, caused by the Heavy Rains and Snows

ONE OF THE GREATEST TROUBLES EXPERIENCED IN ITALY—and the cause of much of the Eighth Army's slowness in advance: the flooding of the rivers and the bursting of the river banks. A typical scene after torrential rains had made the Moro River overflow its banks. These batteries were used against the town of Ortona before its fall at the end of December. In addition to the rains and floods, heavy falls of snow and frequent mists and fogs also contributed to hold up the advance—*Drawing by W. G. Whitaker*

AFTER THE HEAVY RAINS, CAME THE SNOW AND THE WINTER STORMS. These further complicated matters, especially for the guns, many of which were severely affected. The weather conditions in Italy, in fact, proved far more difficult than in the desert: they contributed greatly to the "hold up" of the Eighth Army along the Adriatic and in the Apennines—*Drawing by W. G. Whitaker*

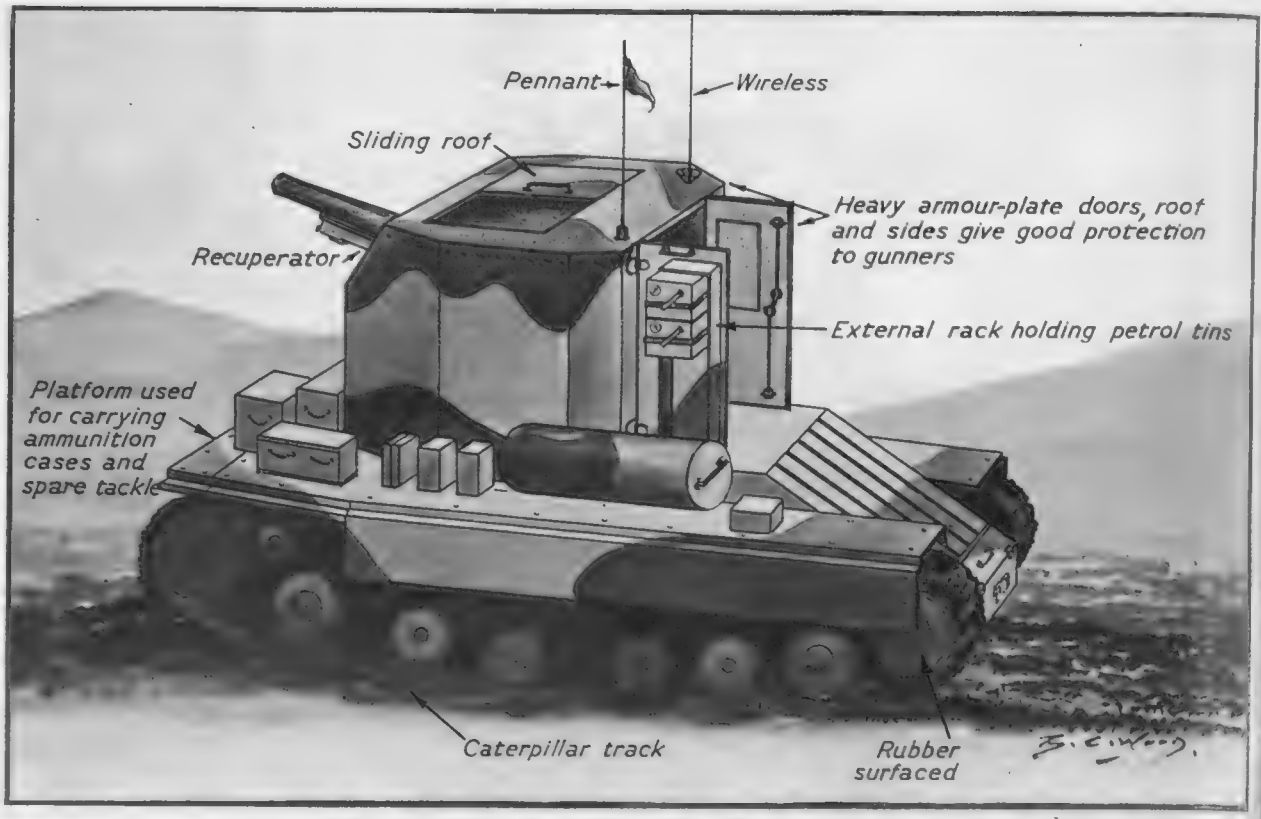
During the past weeks a new word has frequently been appearing in the despatches of war correspondents from both the Eighth and Fifth Army fronts. This is the phrase "military deadlock." First came the slowing down caused by the torrential rains and the consequent collapse and flooding of the river banks; then came the fogs and snows—so that the "slowing down" eventually became a "deadlock." Despite successful local actions, no big advance forward could be made by either Army, largely owing to the appalling weather and the floods which came in its train. The new landings at Nettuno have broken the deadlock, however; it is not unlikely that soon we shall be hearing of big advances all along the line in consequence. When the snows came, they followed on a period of very heavy rain. Few parts of the line were free from the clogging effect of the snowfalls. At each end of the battle-line—in the proximity of the Tyrrhenian and Adriatic seas—the falls were not so persistent, and there has been a tendency for the snow to thaw. The resultant slush has been very trying to everyone who has had to endure it. Where the line climbs into the mountains the effects of snowfall have brought about not only personal discomfort, but a slowing-up of the whole machinery of warfare. Heavy drifts have formed on the higher ground, seriously hampering all military operations and making the movement of transport almost impossible. Infantry and gunners in exposed positions have turned out in the morning to find everything buried under layers of snow. Arctic conditions were reproduced in the forward lines or gun positions, and much of the camp or bivouac equipment has had to be dug out before the day's work could be begun. "The front," says one correspondent, "was one wilderness of white with dark veins cut through the ermine cloak where the very torrents runnelled down to the grey Adriatic, and dark blobs where gunners and infantry had burrowed into the freezing earth while the battle raged on"

INVENTIONS and DEVICES

Used by the Allies and the Enemy — Illustrated with Drawings and Photographs

The Bishop on the Valentine chassis : News from the Italian battlefronts illustrates the success of one of the most characteristically British pieces of improvisation in this war—the Bishop mobile gun. This was born in the Libyan sands, when somebody decided to mount a 25-pounder piece on a Valentine tank chassis. These weapons have rapidly evolved from their crude beginning, and to-day they constitute efficient, foolproof and completely self-contained units.

Towing behind them the two-wheeled caissons, or ammunition trailers, of the 25-pounder gun, they can continue working for a considerable period without supplies. During action the ammunition is conveyed from the rearwards trailer to the loader by a man who stands in the intervening space. The crew travel in the tank, which carries tins of fuel for reserve use. The trailer is connected to the Bishop by a stout shaft.



THE SELF-PROPELLED BISHOP GUN still plays a large part in Italy in "winkling out" pockets of enemy resistance. This drawing shows how the 25-pounder is enclosed for protection on its Valentine chassis—*Drawing by B. C. Wood*

THE BISHOP IN ACTION : How the gun operates on the field of battle—a picture taken during the Italian fighting

The great value of the weapon in Italy has been its capacity for creeping forward into difficult, advanced positions where ordinary 25-pounders would be dangerously exposed or unable to move. The Bishop has indeed proved an ideal "winkler" for dealing with enemy machine-gun posts, and German prisoners have often declared that from their side it seemed an automatic gun, such was the rapidity of the close-range fire.

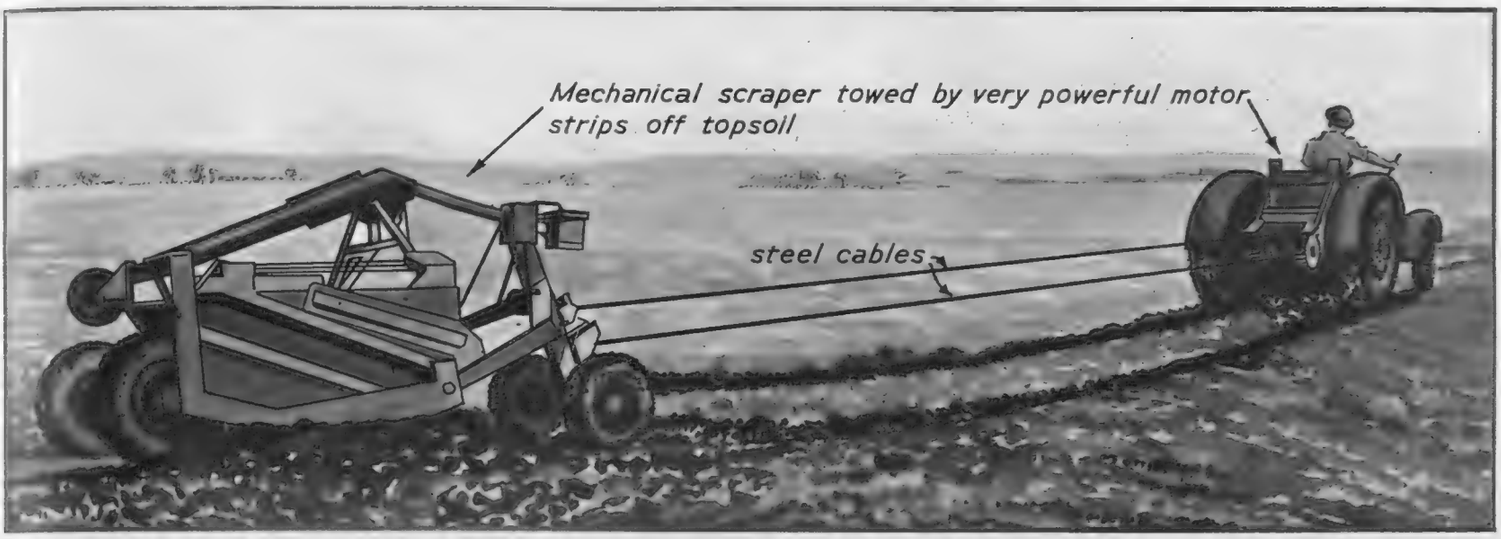
The Valentine tank is a 16-ton vehicle with a speed of 15 miles an hour : the 25-pounder gun—one of the best all-purpose weapons ever produced by Britain—has a range of 13,000 yards. The powerful combination of tank and gun can be taken over almost any type of country. It is, in fact, a step nearer to the perfect transport of heavy guns in the quickest possible manner. Incidentally, the Bishop was not the first type of self-propelled gun : it was preceded by the Priest—a 105 mm. mounted on a General Grant tank chassis.

THIS IS ONE OF THE PRESSURE-TYPE S-MINES used by the Germans as anti-personnel bombs. The detonator prongs are visible at its top. These S-mines are sown in small holes, only lightly covered with loose earth

***On right*—The German 150 mm. :** Here is one of the heaviest German guns used against our troops in Italy. It was found by our troops after their recent occupation of the village of Gonsalvi, to the north of Orsogna. Evidently it had been put out of action by superior counter-battery work : the jagged holes in the barrel have been caused probably by shell or bomb splinters. Indian troops (who have been participating in the fighting in this region) are interested in the mechanism, left intact by the retreating enemy—a sign of his panic at this spot or his waning morale, for he was always very careful in the early days of the war to remove breech-blocks and other equipment before abandoning guns. In this case, although damaged, the gun was nevertheless found to be intact

Outstanding features of the weapon are its solid-tyred wheels, ribbed in an effort to increase mobility, and the three massive recuperating cylinders, designed to take up recoil in different directions. But it is doubtful whether these devices have entirely overcome the problem of making such a heavy gun—150 mm.—suitable for use on soft ground at short notice. For best results a semi-permanent emplacement and careful preparation are still needed

A GERMAN 150-MM. GUN, one of the heaviest enemy weapons used during the recent fighting in Italy : it was put out of action near Gonsalvi, a village lying to the north of Orsogna. The building seen in the left background had been used by the Germans as their Headquarters



LEVELLING AN AIRFIELD IN THE AZORES—and how it is done by tractor-hauled "scrapers"—*Drawing by B. C. Wood*

Since the Portuguese Government granted the Allies facilities in the Azores, great progress has been made in the task of aerodrome construction, to provide bases for the planes now operating against the Atlantic U-boats. For centuries past the traditional vehicle in the Azores has been the bullock-drawn cart: to-day more modern implements are being used for the task of levelling out the ground. The principal one is the "scraper," illustrated in the three pictures reproduced here: this is, in effect, a huge scoop attached to a towing tractor, and capable of hacking out tons of earth at a time. Royal Engineers are co-operating in this work in the Azores with the R.A.F.

A CLOSE-UP OF A 12-CUB.-YARD "SCRAPER" stripping off the top soil: This machine is towed by the tractor seen on the right

THE TRACTOR AND ITS CABLE seen on an airfield under construction in the Azores. It belongs to the R.A.F., but is operated by the R.E.s

THE LATEST AMERICAN TANK, THE M.5: it has speed, manœuvrability and silence; it is armed with one 37-mm. quick-firer in a revolving turret and can also carry a ·30-calibre machine-gun

A "SECRET WEAPON" FOR FORTRESS GUNNERS: A top-turret gunner experimenting on the range. An officer in an American armament section built this strange weapon for the "skeet" range on his aerodrome. It has been designed to improve the marksmanship of the gunners in the daylight-raiding Flying Fortresses. The weapon has been constructed out of a shot-gun: it has been fitted with sights and with the handles and mount of a machine-gun: it operates in the same manner as the weapons carried in the big aircraft

The M.5: The United States Army has long made a speciality of light tanks for cavalry or reconnaissance purposes, and a very great number of these are now in use in every theatre of war—not excluding Russia! Good work was done in the Western Desert by the M.3 light cruiser, young brother of the M.3 medium, or Sherman. On the basis of experience with that model, our Allies have now produced the M.5 light cruiser, as shown above, and this has lately reached Britain in considerable numbers.

Its function is to operate in advance of the main forces, and for that purpose it has been given a high turn of speed, the ability to twist on its tracks like a Bren carrier and a remarkably silent mechanism, so that the enemy will not quickly become aware of its approach. If the tracks and bogie wheels are carefully studied, it will be seen how the arrangement of springs contribute to these qualities.

Everything about the tank is easy to operate, and it will be noted how the deck is free from extraneous impedimenta. Access to the turret is gained by removing triangular sections. The driver has a hatch on the left-hand side of the gun, in the deck, and can drive with his head through this if the coast is clear. The 37-mm. quick-firing gun is designed for hit-and-run work, and a ·30-calibre machine-gun can be fitted. The grating at the rear admits air to the engine. These tanks have already been used successfully in Italy and the South Seas. The photograph above brings out clearly most of the external salient features of the type.

HOW THE INTELLIGENCE OFFICER OF A NEW FIGHTER GROUP INSTRUCTS HIS PILOTS in the Briefing Room by means of an invention of his own design, which shows the squadrons the proper place they must assume in the air

On right—

Captain G. J. Burris is the Intelligence Officer of the new P51B. Fighter Group in England, which operates the new and improved Mustang. He is here seen demonstrating an invention which he uses in the Briefing Room to illustrate the formation and altitude of fighters and bombers on long-range raids over enemy territory. He assigns his squadrons to their proper places by using this multiple-level table. The planes, as seen here, are not in any accepted formation for combat: they merely illustrate the use of the gadget. Heavy bombers are in the two lowest levels, with layers of fighters above and behind to protect them from the enemy's attacks

The REHABILITATION of STRICKEN EUROPE

The After-the-War Task of U.N.R.R.A. in Relieving the Distressed Countries

Described by CHARLES GRAVES

THE new vote of credit for which Sir John Anderson asked in the House of Commons last week drew further attention to U.N.R.R.A., the biggest of all the philanthropic schemes of the United Nations. U.N.R.R.A. is the abbreviation of United Nations Relief and Rehabilitation Administration, and its task can be defined as planning the provision of essential imports and services required for temporarily helpless territories, and ensuring that these supplies should be allotted equably. Ultimately, it is the function of U.N.R.R.A. to help countries to help themselves.

It was our lion-hearted Prime Minister who originally sponsored the idea of U.N.R.R.A., declaring that it was the intention of His Majesty's Government to arrange for the advance of the speedy entry of food into liberated areas. This was in August 1940, when England was apparently at the complete mercy of Hitler; when there were only a few thousand rifles available throughout the country, together with fifty obsolescent tanks; when the L.D.V. were prepared to defend themselves to the last on the beaches and in the cities. In spite of all this, and with a sublime fanatical belief in the success of our cause, Mr. Winston Churchill went ahead with his plans for relieving the Continent at a time when England stood alone, or, rather, was apparently beaten to her knees. For even then it was clear that if, and when, the various occupied countries on the Continent were freed from enemy occupation, England would be faced there with conditions of starvation, destitution, and disease far more widespread and acute than anything experienced after the last war. This meant that food, clothing, medical aid, and the other necessities of life would have to be rushed to millions of people, while measures would have to be taken to restore their agriculture and industry to full productivity as quickly as possible.

So, to give effect to his undertaking, Mr. Churchill arranged that certain preliminary inquiries into the question of post-war relief should be begun by a Committee of British Government officials under the chairmanship of Sir Frederick Leith-Ross.

After Germany had invaded Russia and the latter had thus become our Ally, the U.S.S.R. joined us and the Refugee Governments from Europe in a meeting at St. James's Palace, where a six-point resolution was adopted. This stated, among other things, that while each of the Allied Governments and authorities would be primarily responsible for the relief of its own people, there should be co-ordination of their respective plans. As a result, an Inter-Allied Committee was set up to prepare estimates of post-war European requirements of food, raw materials, and articles of prime necessity. Later on, when Japan attacked Pearl Harbour, and thus the United States found itself our Ally, the American Government also joined the party. A year later, Governor Lehman, of New York, was appointed Director of Foreign Relief and Rehabilitation as far as the United States was concerned.

At first the programme, as developed by the United Nations, consisted of making a comprehensive survey of the probable requirements in the order of their urgency, together with the planning of long-distance transport, building up of reserve stocks, and, finally, their distribution. Any reserve stocks in the British Isles were, of course, rapidly diminishing as a result of the wholesale U-boat campaign.

In the meantime, a detailed report on the probable requirements of the Allied countries of Europe was produced. The figures are terrifying. Apart from anything else, it is estimated that 1,000,000 tons of seed is required. During the first six months after liberation, it is estimated that France alone will require 1,333 thousand metric tons of food; 431 ditto of oil seeds, oils, and fats; 289 ditto of feeding stuffs; 168 ditto of chemicals; 505 ditto of fertilisers and pesticides; 29 ditto of rubber; 901 ditto of wood and cork; 355 ditto of paper; 44 ditto of hides, leather, and footwear; 197 ditto of textiles and clothing; 981 ditto of petroleum and petroleum products; 1,364 of coal and coke (shades of Will Lawther); 19 ditto of non-metallic minerals; 333 ditto of base metals and manufactures; 119 ditto of machinery and vehicles; and 19 ditto of drugs and hospital supplies.

Apart from France, there are the requirements of Belgium, Luxembourg, Czechoslovakia, Greece, the Netherlands, Norway, Poland, and Yugoslavia, the grand total being 45,855 thousand metric tons.

Mark you, these figures were worked out nearly a year ago, and are, I repeat, only for the first six months after the collapse of Germany. No wonder that the Ministry of Food and other Government Departments make it clear that it will be impossible for this country to remove all food, clothing, and other restrictions directly after the armistice.

Recently, the representatives of forty-four nations met at Atlantic City for the first session of U.N.R.R.A. Astonishingly enough, a great deal of work was carried out in spite of the unwieldy number of delegates. Unfortunately, the small size of British newspapers made it impossible for the proceedings at Atlantic City to be fully reported. What happened was that agreement was reached on the practical programme of defined scope. It was decided that U.N.R.R.A. will provide essential consumer goods to meet immediate needs; relief services like health and welfare; assistance in caring for and maintaining records of persons found in any areas under the control of any of the United Nations who have been displaced from their homes, and, of course, securing their repatriation or return; rehabilitation supplies and services like agricultural requirements, fishing equipment, machinery, and spare parts; and rehabilitation of public utilities and services as far as they can be repaired or restored to meet immediate needs, like light, water, power, transport.

It will be essential for U.N.R.R.A. to ensure a fair distribution of goods which are in short supply, so it will be necessary to have a full working knowledge of all the relief and rehabilitation import requirements of each area.

Many people have probably thought that U.N.R.R.A. is merely a new name for A.M.G.O.T. This, of course, is not the case. A.M.G.O.T. (or A.M.G. as it has now been termed) is the temporary Military-Civilian government of territory very recently liberated. It may be necessary, of course, that A.M.G. will have to handle some of U.N.R.R.A.'s earlier plans, so to this extent there may be overlapping; but U.N.R.R.A. is totally different in conception.

The cost of this gigantic international welfare scheme as agreed at Atlantic City is to be borne by those countries whose home territory has not been occupied by the enemy; and is to be fixed at one per cent. of the country's national income during the year ended June 30, 1943. This amount is to be a single contribution, not an annual one, but is subject to ratification " by the constitutional bodies of the individual countries concerned "; hence the Chancellor of the Exchequer's request for approval in the House of Commons last week. It was realised at Atlantic City that the basic amount might be burdensome in some cases, and due allowance was made for this. It was suggested that at least 10 per cent. of, for example, our contribution is to be in currency which can be expended outside the country itself, with the balance in the form of a credit in local currency. This will be easy enough for the United States, but by no means simple for Great Britain, whose citizens have been deliberately deprived of their holdings of foreign shares and currency. Invaded countries, including Russia and China, were not included in the one per cent. recommendation, but are invited to make contributions if they can. One of the first jobs of U.N.R.R.A. will be to suppress black markets all over the Continent, and use, where possible, the normal methods of distribution to prevent inflation and restore economic activity.

The whole task of rehabilitation is not to be considered as the beginning of reconstruction. It is merely an essential part of the task of providing relief. All of which hinges upon a vast problem of inland transport. London is to be the headquarters of the European Committee, but no place has yet been fixed for its opposite number in the Far East.

There is one point which is somewhat difficult to settle. Great Britain and the United States do not think that it is possible for enemy countries who receive assistance from U.N.R.R.A. to pay in advance for the goods that they will ultimately receive. The other Allies think that they should do so. It is quite certain that nobody wants Germany or Japan to be able to borrow money and build up another war machine. Nor will this be allowed to happen.

As far as the liberated countries are concerned, it will be our business not only to do the minimum of preventing outbreaks of disease, but also to build up their health and give them enough raw materials and machinery to start their producer goods industries once again. For in their case, the more that can become industrialised once more, the less goods that we require at home will we have to export to them.

Speaking generally, military relief is to give place to civilian relief and rehabilitation as soon as possible. In the case of Holland, its civil administration has already been planned. Dutch civil and military administrators had a rehearsal in London last week to show how in simulated post-invasion conditions they would proceed to restore order. Representatives of other European countries will probably follow suit.

It is still not absolutely clear how U.N.R.R.A. stands in relation to military command needs, nor, most important of all, has the personnel of experts been picked. That is going on at the moment. And it is certain that the success of the whole scheme will depend on the personality, enthusiasm, expert knowledge, and hard work of the Regional Controllers, or whatever those officials will be called who have to handle both short-term and long-term policies in the individual areas.

BOMBED-OUT NEAPOLITANS TAKE TO THE HILLS: The people of Naples whose homes were blasted by bombs and artillery shells during the fierce battles which were waged in and around the great seaport, have taken to the hills, where many of them are now living in caves until the city will once more be free from the threats of German air attack. This picture shows a typical cave-dwelling family in their new abode in the hills

AN A.M.G. COURT SCENE DURING A TRIAL IN PALERMO: This court set up by the Allied Military Government is trying thirty-eight Italians for participation in a Sicily riot in which twenty people were killed. The defendants stand in the background; the court—of two American and two British officers—sit around the table; the interpreter stands on the left in front of a witness; and there is also a defence counsel (not shown). Sentences were light, because it was impossible to prove that the riot was pro-Fascist. Eleven of the prisoners were acquitted, and the rest were given sentences ranging up to three years hard labour

The fact that goods made of raw materials in short supply owing to war conditions are advertised in this publication should not be taken as an indication that they are necessarily available for export

NEWS ITEMS OF HOME INTEREST

TWO NEW BISHOPS ARE CONSECRATED IN WESTMINSTER ABBEY : The Archbishop's Procession—fourth from the right is the Rev. N. S. Jones, the new Assistant Bishop of Lagos, and fifth from the right is the Rev. G. F. Cranswick, the new Bishop of Tasmania. The consecration of two new Colonial Bishops by the Archbishop of Canterbury took place at a ceremony held in Westminster Abbey on the anniversary of the Conversion of Saint Paul. The Rev. Norman Sherwood Jones, who becomes Assistant Bishop in the Diocese of Lagos at the age of thirty-one, was formerly Vicar of the Church of St. Nicholas Radford, Coventry. The Rev. Geoffrey Franceyn Cranswick, the new Bishop of Tasmania, was India Secretary of the Church Missionary Society. After the Consecration a peal was rung on the bells of the Abbey Church

THE NEW ASSISTANT BISHOP OF LAGOS (on left) and the new Bishop of Tasmania (on right) after their consecration by the Archbishop of Canterbury, Dr. Temple (in centre) in Westminster Abbey

NORWEGIAN GIRLS PLAY FOOTBALL IN THE MUD IN HYDE PARK. "Handball" is a game new to England : it is a cross between netball and football. Norwegian girls have introduced it to London and play every week in Hyde Park, competing with the Americans and their baseball. Handball is not the gentle game it sounds : a player is not supposed to kick, or grab, the ball ; but there are usually scraps, when the game gets fast and exciting—and, in a scrimmage, the players are likely to land up on all-fours. These two pictures were taken during a recent match in the mud

POLISH W.A.A.F.S READY TO SERVE WITH THE R.A.F. : A domestic evening in their dormitory at the end of the day's duties at a north-west training camp. Polish airwomen in Britain have one great aim, which they pursue with singleminded relentlessness—to prepare themselves for operational work as soon as possible. At a W.A.A.F. training camp in the north-west of England, 160 of them recently completed the first step towards their ambition. They passed out as the first all-Polish squadron to complete its training for the W.A.A.F. They will now go to learn trades—radio, telephonists' work, etc.—before being posted to Polish stations, where they will relieve British girls for work at other R.A.F. stations. Mothers and daughters are serving side by side in the unit, living in the same huts, sharing the same duties

MISS DIANA BARNATO AT THE CONTROLS. She hopes to ferry bombers across the Atlantic for the R.A.F. Miss Diana Barnato, twenty-four-year-old daughter of Wing-Commander Woolf Barnato, and granddaughter of Barney Barnato, is a member of the Air Transport Auxiliary, with the rank of Second Officer. She belongs to the Pilot Taxi Service, and she hopes soon to go to America and ferry some of the Lease-Lend machines over the Atlantic. She is a competent flyer now ; she made her first solo flight at Brooklands five years ago at the age of nineteen. Her mother is an American and her sister married an American actor and is now living in Los Angeles

The World of Books—By Vernon Fane

MEMORIES of GREAT DAYS and PERSONALITIES

J. B. Booth, late of the "Pink 'Un," Looks Back; Mr. Ramshaw's Wartime Adventures; A Newly Published Novel by Vicki Baum; Fantasies and Fairy Tales for Adults

IN spite of the facile piece from the French copy-book, the pretence that nothing changes can be nothing more than a pretence. Mr. J. B. Booth, sole surviving member of the staff of the famous "Pink 'Un," disposes of any doubts on mutability in THE DAYS WE KNEW (Werner Laurie., 21s.). The days in which the robustious and daring "Pink 'Un" flourished belong to an age in which, if the pace was slower, the tempo of life was pitched in a very different key. The comedians of Portland Place and the celluloid tragedians may play to bigger audiences, but somehow they seem to lack the stature of an Irving or a Dan Leno.

So it is with the journalist historians of that garish but full-blooded Bohemia. This book reminds us that they knew their craft from A to Z. They could write.

If there be any devotee of modern journalism who doubts my point, let him turn to the chapter in this book on Robert Sievier and see how the biography of a man who lived a full and tempestuous life can be compressed without missing a character, line or a high-light.

Trust an old hand to begin his story with a bang, and exactly at the right moment. August 4, 1914, was Bohemia's *götterdämmerung*. With Edgar Wallace Mr. Booth was walking across Piccadilly Circus amid a lot of yelling and waving of flags. A policeman, wearing a South African War ribbon, said, "They 're making a terrible fuss about a terrible thing, Sir." Mr. Booth then recalls the uncanny prescience of a leading article Edgar Wallace had just written. "When the fatal day comes, as I believe it will, that Germany realises her human limitations—when, after tremendous and heroic defences, she falls to the irresistible forces arrayed against her—her grief will be greater than her hate, her honest shame a terrible thing to witness. Then must she be crushed and restricted so that she may not grow again. For the Germany that is built from her fragments will be harder than granite, and more deadly than the wounded tiger brooding his hurts."

On the Old Music Hall and its songs Mr. Booth is rich in reminiscence, and in the course of it quotes some spirited letters by Rudyard Kipling. "We feel that the Music Hall was (and is) a necessary part of our civilisation." To most of us Dan Leno is but a legend, but the author knew him well. He recalls that "Leno's humour was wild and inconsequent, yet, at the same time, sane and keenly observant—an impossible paradox to anyone who never saw him. . . . In proof, if any proof were needed, of his freakish originality—after Leno's death a MS. book was discovered, which it had been his custom to carry about with him, and note down any idea that occurred to him. Many of the notes are naturally disconnected, but some ideas he carried to a conclusion, notably a 'melodrama' in four acts and eight scenes. Here are one or two scenes in full."

SCENE: *The Docks.*

Enter Sailor.

SAILOR: Here 's a fine go! I 've been and lost my 'bacca box!

Enter Press Gang.

(They take no notice of him so he volunteers.)

[CURTAIN.]

But this is the kind of book one could go on quoting for ever. They were great days—great personalities. And if anyone needs convincing that the author was and is a great journalist and raconteur, I refer the reader to the last sentence in this book which is a perfect example of how to tell a story—in a sentence.

Mr. Ramshaw is also a character—I once met him in a Transatlantic liner and can vouch for the strength of his personality—but he is neither a character of fiction nor a living person. He is, in fact, a golden eagle from the Highlands of Scotland, and the constant companion of Captain C. W. R. Knight, with whom he has been several times to the United States, on one occasion surviving a torpedoing.

ALL BRITISH EAGLE (Hodder and Stoughton. 10s. 6d.) is Captain Knight's account of Mr. Ramshaw's adventures during this war—adventures which not unnaturally have been closely shared by his owner and impresario. Together they went to France in the early months of the war, to help entertain the B.E.F. Together they travelled the States from north to south, Ramshaw having his own penthouse in New York, where he was not above receiving the gentlemen of the Press. Together they went coursing hares with the Home Guard—Ramshaw has his own methods here—and together they visited R.A.F. stations, at one of which Mr. R. was elected squadron mascot.

Captain Knight's book is agreeably light and discursive, and apart from anecdote is devoted to proving the indisputable fact that Mr. Ramshaw—who again has had his own method of helping with the Wings for Victory campaign—is indeed a 100 per cent. British eagle.

BRITISH STAGE STARS at the opening of a new experimental radio station in North Africa. The first of what promises to be a chain of British Forces' radio stations was officially opened in North Africa on January 7. The opening address was given by Brigadier A. L. W. Newth, Director of Welfare, from a blanket-lined room in a villa at Bouzares, near Algiers. Among those taking part in the subsequent broadcast were Leslie Henson and Tommy Trinder: they are seen in this picture with Brigadier Newth on the left, and another artiste, Miss Decima Knight, in the centre

THIS IS "DINGO," the rough-haired mascot of a Spitfire squadron now operating from a base in England

ONCE IN VIENNA (Bles. 8s. 6d.) is one of Miss Vicki Baum's earlier novels that has not, I believe, been published in this country before. Certainly it belongs to an earlier period in her writing, when romanticism was her forte, and when the relationships of young girls to operatic tenors were of the first importance. Not that Miss Baum has ever lost that passionate and inspired interest in the ways of men and women in and out of love. As a theme it still remains of the first importance to her, whether she is writing a history of the rubber-tree or the story of a car smash.

The Vienna of which she writes here is the city as it was at the beginning of the century—or at least that part of the city which revolved round the Opera House and the Conservatoire. For this is a story of people who loved Music and Their Art quite as well as they loved each other, and who found consolation for a broken love-affair in a contract at Prague, or solace for a broken middle register in a torrid, sleepless month in the Semmering.

Herr Hannes Rassiem, whose every entrance and exit is surrounded with an aura of "eau de Cologne, cigarettes and a fresh-smelling English soap," is the hero in every sense, since he is a blond, Wagnerian tenor who gives a matchless performance of Tristan both on and off the stage, and is, in my opinion, the most crassly egotistic piece of nonsense who ever struggled out from between the covers of a novel.

His singing classes at the Conservatoire are naturally the most popular of all and, among the girls who faint for love of him are Dima, beautiful, hard and ambitious, and Elis, gentle, loving and anciful. After a passionate affair with Dima, Hannes returns to his wife, the great singer Kouczowska, who has lost her voice, and they agree never to part again. On this the little Elis, whom he had once kissed, commits suicide, but Dima goes from strength to strength, with bitterness in her heart and a new contract n her handbag.

Whatever charm this novel has—and as always with this author's work it is immensely readable—is as dated as parasols and that tulle headgear known as a fascinator. But the charm nevertheless exists, even if it is a fleeting and ephemeral one.

Well, I really don't know about Miss Eudora Welty's new novel. It is a fantasy, and recognising in myself a tendency to edge away from fantasies, I have made myself go to the other extreme in this case and read the little book with an almost painful intensity. And as far as I can go in its appreciation is to say that for people who like fantasies, and those adults who enjoy fairy-tales, THE ROBBER BRIDEGROOM (Bodley Head. 10s. 6d.) is the very thing. With a good deal more conviction, I can say that Miss Welty has considerable powers of imagination, great originality and is fairly preoccupied with the creation of a new writing style, though I 'm not sure that such innovations as "Indeed, it was just in time's nick" are much of an improvement.

The story concerns one Rosamond, a very beautiful young girl, and a great liar, who lived with her father and her ugly, cruel stepmother in a Mississippi forest. Every day her stepmother would send her out hoping that she would come to some harm. One day a handsome robber stole all her clothes and the next day carried her off to his cottage where he lived with the rest of his band.

Rosamond's adventures with them, and with a band of Indians who captured the robbers in their turn, are what Miss Welty's compatriots might describe as "quite something." She finally escaped with her father and her bridegroom, but the stepmother was very properly killed. After more events of an equally alarming nature Rosamond found her husband again in New Orleans, where he had become rich, and they lived happily ever after, though it is reasonable to suppose that Rosamond's talent for exaggeration lent a certain spice to their lives.

THE METROPOLITAN ALEXIY OF LENINGRAD, decorated with the medal "For Defence of Leningrad": By decree of the Presidium of the Supreme Soviet of the U.S.S.R., medals "For the Defence of Leningrad" were recently awarded to a group of priests of the Russian Orthodox Church. In the days of direst peril, the Leningrad clergy helped to strengthen the defence of the city and took part in the collection of funds for arming the Red Army as well as for sending presents to Red Army soldiers

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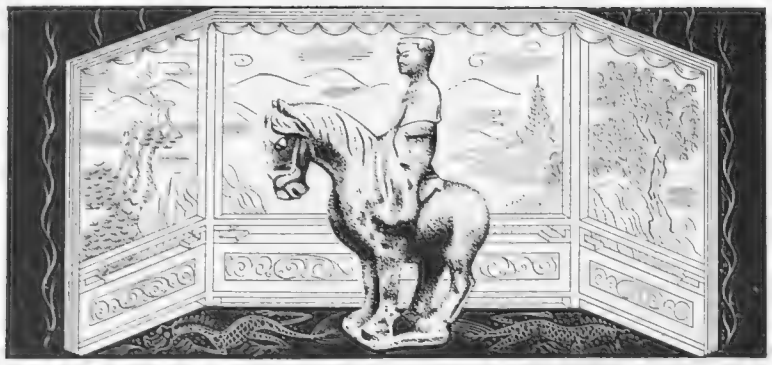

Chinese horse typical of the T'ang period

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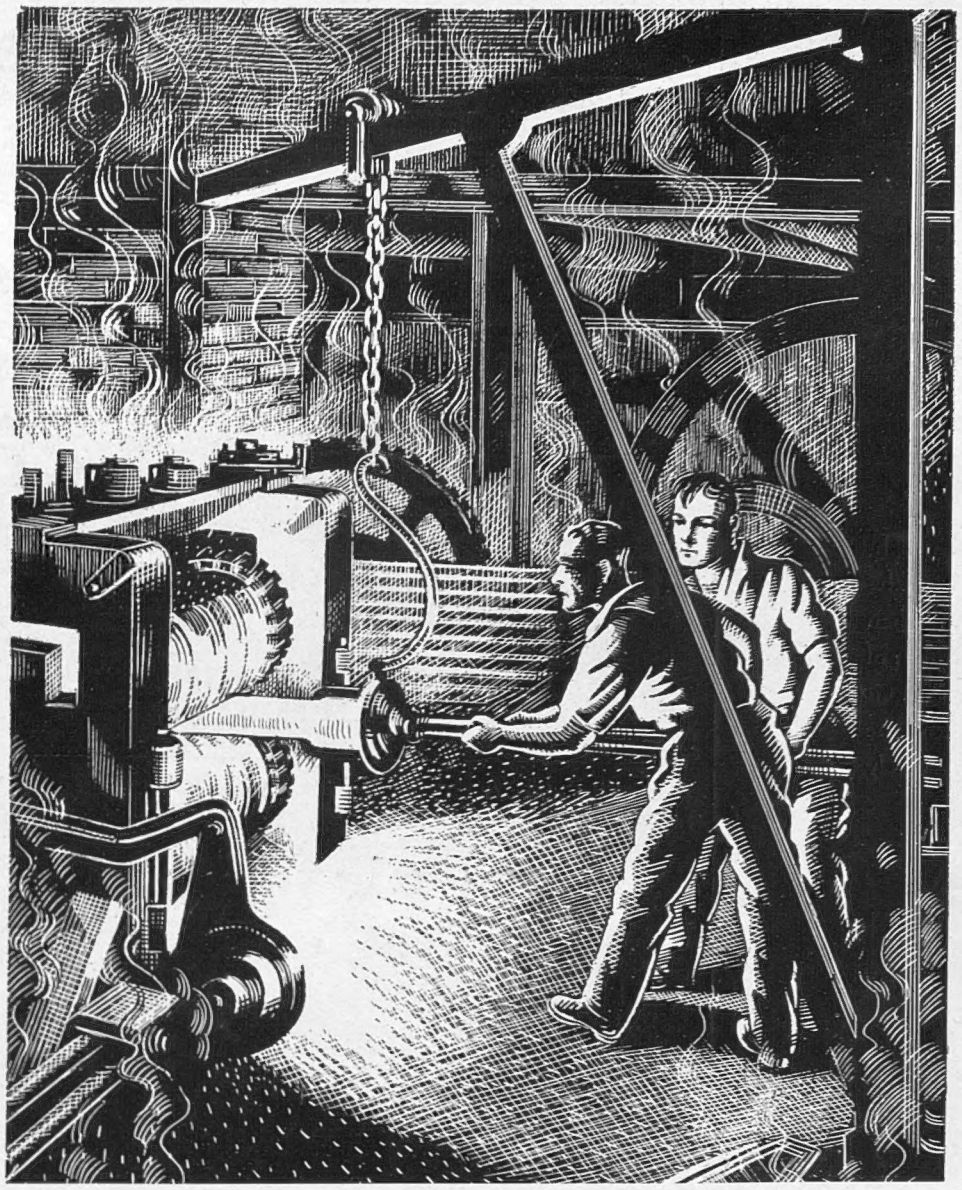

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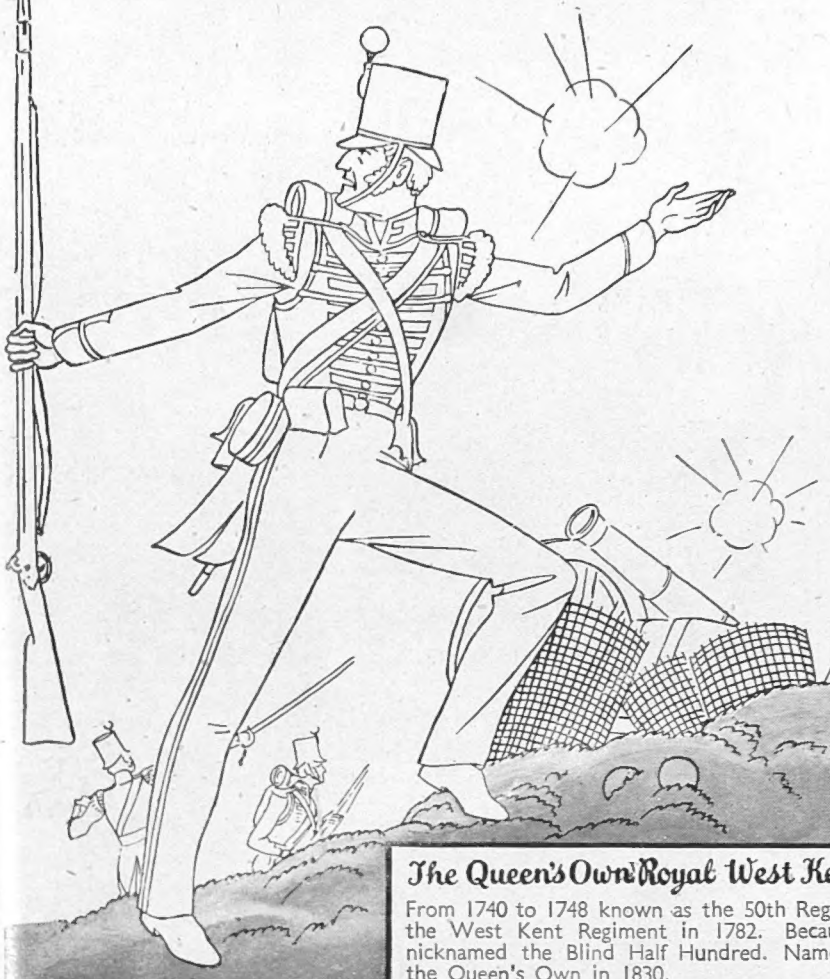

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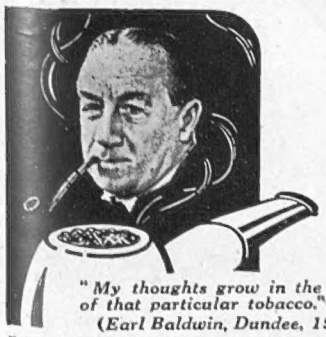

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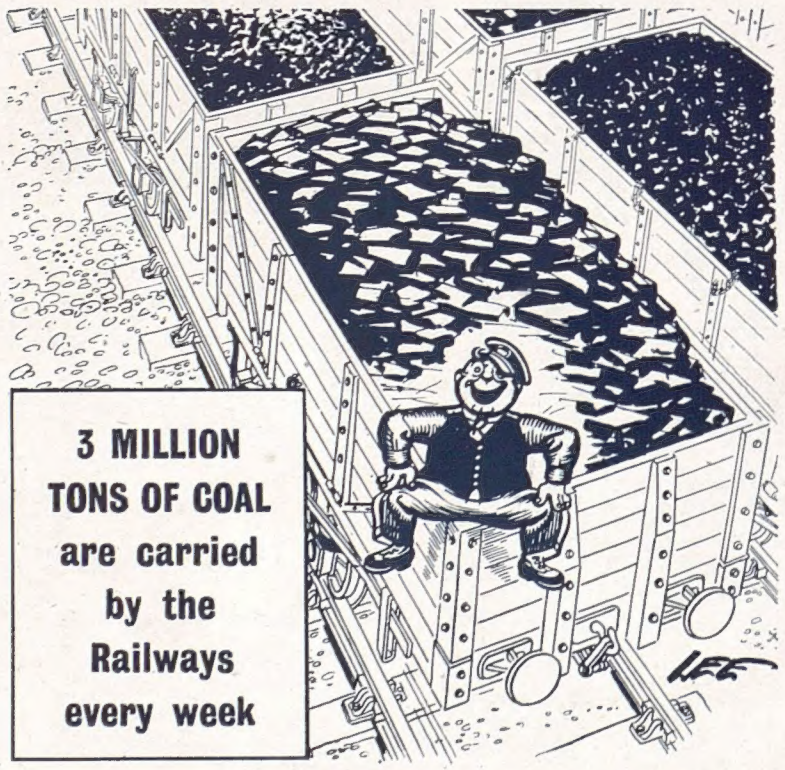

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